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【手続補正書】

【提出日】令和3年5月12日(2021.5.12)

【手続補正1】

【補正対象書類名】特許請求の範囲

【補正対象項目名】全文

【補正方法】変更

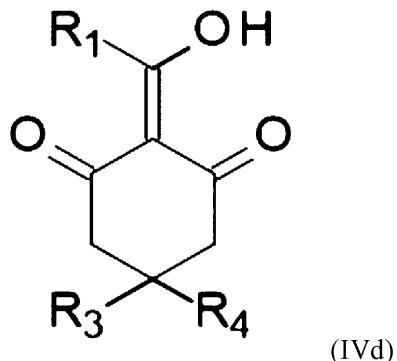
【補正の内容】

【特許請求の範囲】

【請求項1】

一般式(Iv d)の化合物、またはその薬学的に許容される塩であつて、

【化1】



ここで、

R₁は、H、重水素、C 1 - 6 ヒドロキシアルキル基、C 1 - 6 ハロアルキル基、および置換または無置換フェニル基、からなる群より選択され、

R₃は、それぞれ独立して、H、ヒドロキシル基、アミノ基、ハロゲン、シアノ基、ニトロ基、カルボキシル基、ホルミル基、アミド基、-NH-COR_b、エステル基、C 1 - 6 アルキル基、C 1 - 6 ハロアルキル基、C 1 - 6 ヒドロキシアルキル基、C 1 - 6 ヘ

テロアルキル基、C 1 - 6 アルコキシ基、C 1 - 6 アルコキシアルキル基、C 2 - 6 アルケニル基、C 2 - 6 アルキニル基、無置換もしくは置換-C O N H - (C 6 - 10 アリール)、無置換もしくは置換-C H = C H - (C 6 - 10 アリール)、置換C 6 - 10 アリール基、無置換もしくは置換5 - 10員ヘテロアリール基、無置換または置換C 3 - 10 シクロアルキル基、無置換もしくは置換3 - 10員ヘテロシクロアルキル基、無置換もしくは置換の3 - 7員ヘテロシクロアルケニル基、無置換もしくは置換のC 6 - 10 アリールC 1 - 6 アルキル基、無置換もしくは置換のC 1 - 6 アルキルC 6 - 10 アリール基、置換または置換の5 - 10員ヘテロアリールC 1 - 6 アルキル基、および無置換もしくは置換のC 1 - 6 アルキル5 - 10員ヘテロアリール基、からなる群から選択され、

R₄ は、Hであり、

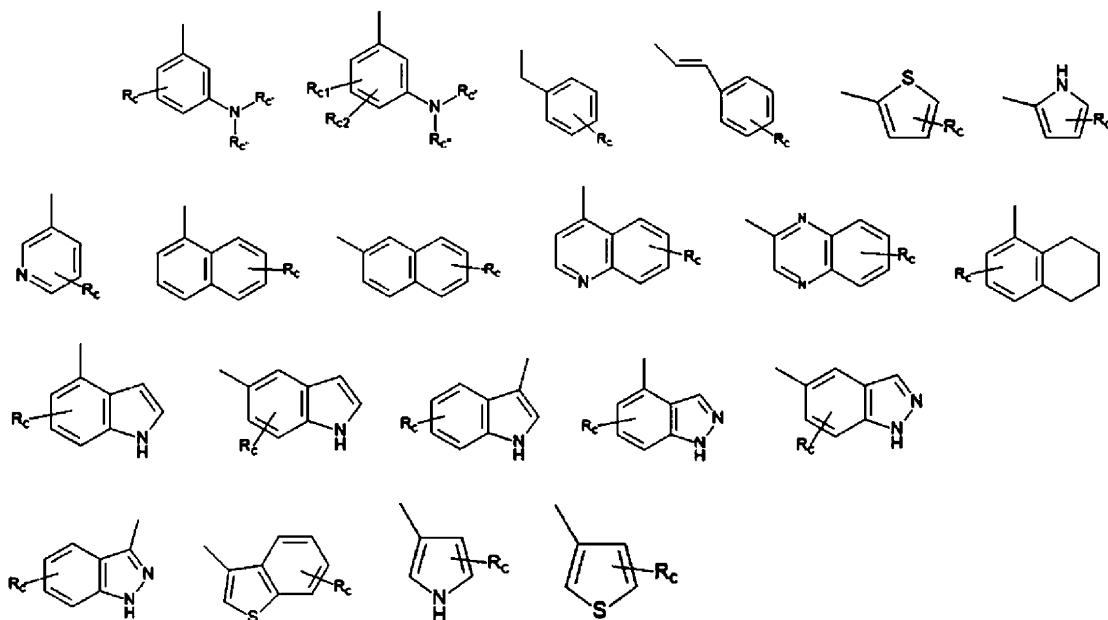
ここで、各々のR_bは、独立して、C 1 - 6 アルキル基、C 2 - 6 アルケニル基、N H R_a、N R_a R_a'、無置換もしくは置換フェニル基、または3 - 7員複素環基、であり、

R_a および R_a' は、それぞれ独立して、HまたはC 1 - 6 アルキル基であり、無置換もしくは置換とは、官能基が、置換されていないか、もしくは、ヒドロキシル基、アミノ基、シアノ基、ニトロ基、カルボキシル基、ハロゲン、C 1 - 6 アルキル基、C 1 - 6 ハロアルキル基もしくはC 1 - 6 ヒドロキシアルキル基、からなる群から選択される一つまたは複数の基により置換されていること、または、二つの隣り合う置換基が結合してC 6 - 10 アリール基、C 5 - 10 ヘテロアリール基、C 3 - 10 シクロアルキル基、またはC 3 - 10 ヘテロシクロアルキル基を形成すること、を意味する一般式(I V d)の化合物、またはその薬学的に許容される塩

【請求項 2】

R₃ は、以下の群から選択され、

【化 2】



ここで、R_c、R_c₁、R_c₂、R_c'、およびR_c''は、独立して、H、ヒドロキシル基、アミノ基、N R_a R_a'、ハロゲン、シアノ基、ニトロ基、カルボキシル基、ホルミル基、アミド基、エステル基、C 1 - 6 ハロアルキル基、C 1 - 6 ヒドロキシアルキル基、C 1 - 6 ヘテロアルキル基、C 1 - 6 アルコキシ基、C 1 - 6 アルコキシアルキル基、C 2 - 6 アルケニル基、C 2 - 6 アルキニル基、C 6 - 10 アリール基、5 - 10員ヘテロアリール基、C 3 - 10 シクロアルキル基、3 - 10員ヘテロシクロアルキル基、3 - 7員ヘテロシクロアルケニル基、C 1 - 6 アルキルC 6 - 10 アリール基、5 - 10員ヘテロアリールC 1 - 6 アルキル基、またはC 1 - 6 アルキル5 - 10員ヘテロアリール基、であり、好ましくは、H、ヒドロキシル基、アミノ基、N R_a R_a'、ハロゲン、

カルボキシル基、ホルミル基、アミド基、エステル基、C 1 - 6 ハロアルキル基、C 1 - 6 ヒドロキシアルキル基、C 1 - 6 ヘテロアルキル基、C 1 - 6 アルコキシル基、C 3 - 10 シクロアルキル基、または3 - 10員ヘテロシクロアルキル基、無置換もしくは置換フェニル基もしくはピリジル基、であり、

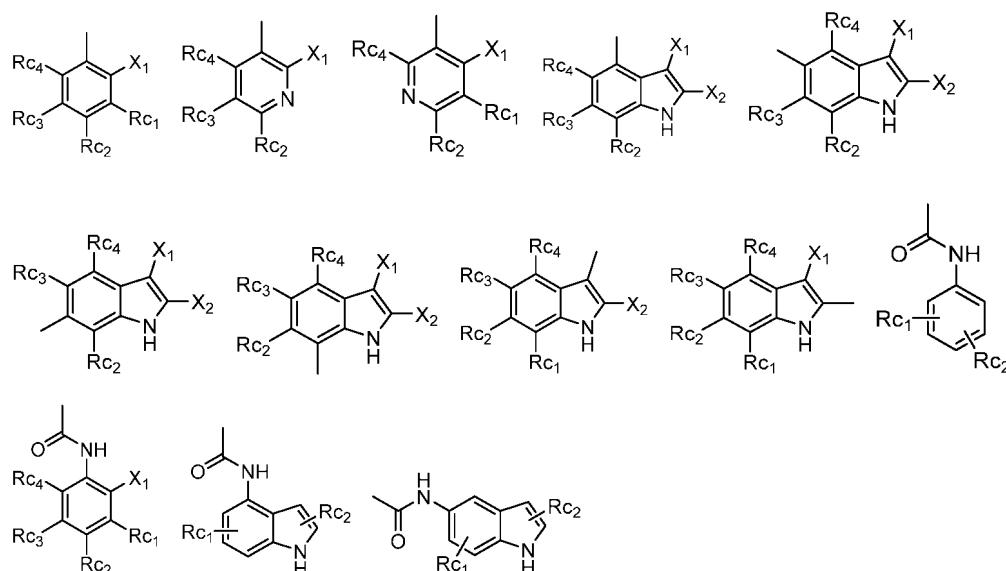
または、R_{c1}とR_{c2}とが結合して、C 6 - 10アリール基、5 - 10員ヘテロアリール基、C 3 - 10員シクロアルキル基、3 - 10員ヘテロシクロアルキル、を形成してもよく、

R_aおよびR_{a'}は、それぞれ独立して、HまたはC 1 - 6アルキル基である請求項1に記載の化合物、またはその薬学的に許容される塩。

【請求項3】

R₃は、以下の群から選択され、

【化3】



ここで、

X₁は、F、C 1、Br、I、またはトリフルオロメチルであり、

X₂は、H、F、C 1、Br、またはIであり、

R_{c1}、R_{c2}、R_{c3}、またはR_{c4}はそれぞれ独立して、H、ヒドロキシル基、アミノ基、NR_aR_{a'}、ハロゲン、シアノ基、ニトロ基、カルボキシル基、ホルミル基、アミド基、エステル基、C 1 - 6 ハロアルキル基、C 1 - 6 ヒドロキシアルキル基、C 1 - 6 ヘテロアルキル基、C 1 - 6 アルコキシ基、C 1 - 6 アルコキシアルキル基、C 2 - 6 アルケニル基、C 2 - 6 アルキニル基、C 6 - 10アリール基、5 - 10員ヘテロアリール基、C 3 - 10シクロアルキル基、3 - 10員ヘテロシクロアルキル基、3 - 7員ヘテロシクロアルケニル基、C 1 - 6 アルキルC 6 - 10アリール基、5 - 10員ヘテロアリールC 1 - 6 アルキル基、またはC 1 - 6 アルキル5 - 10員ヘテロアリール基、であり、好ましくは、H、ヒドロキシル基、アミノ基、NR_aR_{a'}、ハロゲン、カルボキシル基、ホルミル基、アミド基、エステル基、C 1 - 6 ハロアルキル基、C 1 - 6 ヒドロキシアルキル基、C 1 - 6 ヘテロアルキル基、C 1 - 6 アルコキシル基、C 3 - 10シクロアルキル基、または3 - 10員ヘテロシクロアルキル基、無置換もしくは置換フェニル基もしくはピリジル基、であり、または、

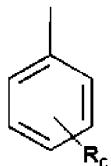
R_{c1}とR_{c2}とが、またはR_{c2}とR_{c3}とが、またはR_{c3}とR_{c4}とが結合して、C 6 - 10アリール基、5 - 10員ヘテロアリール基、C 3 - 10員シクロアルキル基、および3 - 10員ヘテロシクロアルキルを形成してもよく、

R_aおよびR_{a'}は、それぞれ独立して、HまたはC 1 - 6アルキル基である請求項1または2に記載の化合物、またはその薬学的に許容される塩。

【請求項4】

R₃は、以下の構造であり、

【化4】



R_cは、ヒドロキシル基、アミノ基、N R_a R_{a'}、ハロゲン、シアノ基、ニトロ基、カルボキシル基、ホルミル基、アミド基、エステル基、C 1 - 6 ハロアルキル基、C 1 - 6 ヒドロキシアルキル基、C 1 - 6 ヘテロアルキル基、C 1 - 6 アルコキシ基、C 1 - 6 アルコキシアルキル基、C 2 - 6 アルケニル基、C 2 - 6 アルキニル基、C 6 - 10 アリール基、5 - 10員ヘテロアリール基、C 3 - 10 シクロアルキル基、3 - 10員ヘテロシクロアルキル基、3 - 7員ヘテロシクロアルケニル基、C 1 - 6 アルキル C 6 - 10 アリール基、5 - 10員ヘテロアリール C 1 - 6 アルキル、およびC 1 - 6 アルキル 5 - 10員ヘテロアリール基からなる群から選択され、好ましくは、ヒドロキシル基、アミノ基、N R_a R_{a'}、ハロゲン、カルボキシル基、ホルミル基、アミド基、エステル基、C 1 - 6 ハロアルキル基、C 1 - 6 ヒドロキシアルキル基、C 1 - 6 ヘテロアルキル基、C 1 - 6 アルコキシ基、C 3 - 10 シクロアルキル基、3 - 10員ヘテロシクロアルキル基、置換または無置換のフェニル基またはピリジル基、からなる群から選択され、

R_aおよびR_{a'}は、互いに独立して、HまたはC 1 - 6 アルキル基である請求項1に記載の化合物、またはその薬学的に許容される塩。

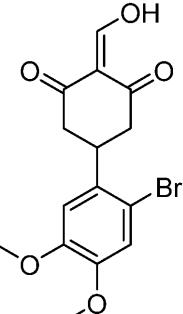
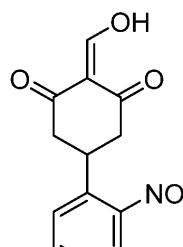
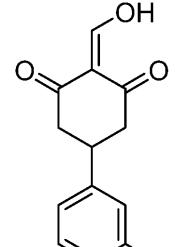
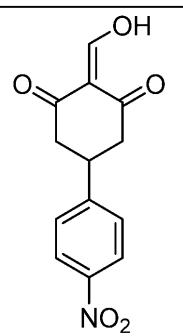
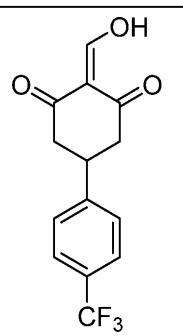
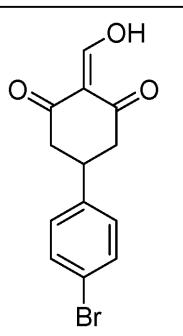
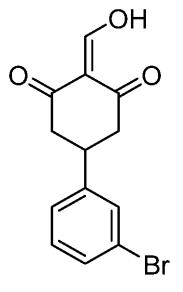
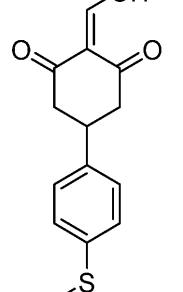
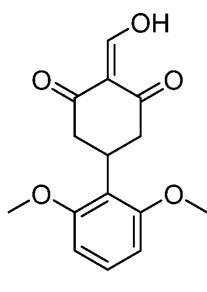
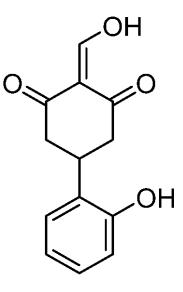
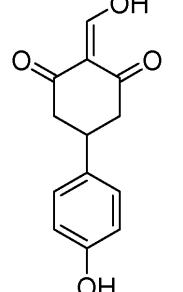
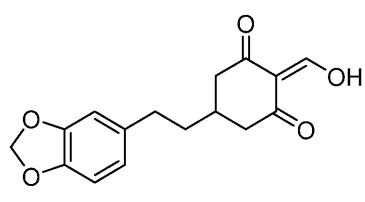
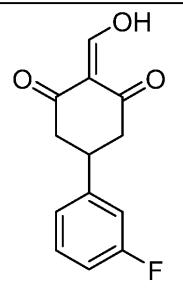
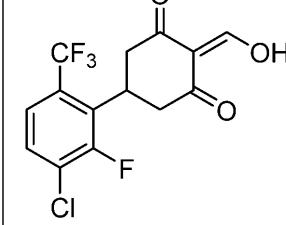
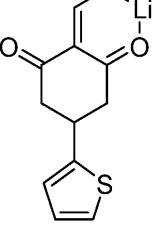
【請求項5】

以下の化合物または塩から選択される請求項1に記載の化合物、またはその薬学的に許容される塩。

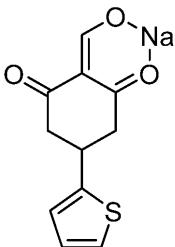
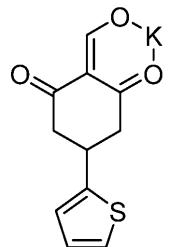
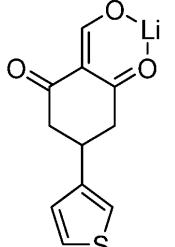
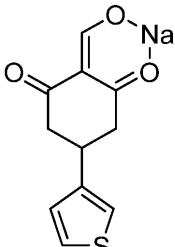
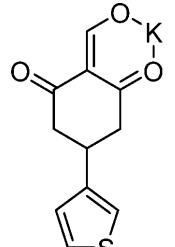
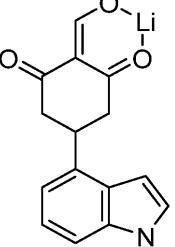
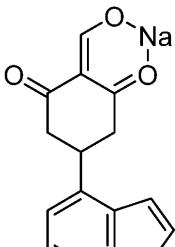
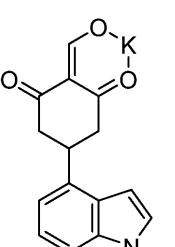
【表 1 - 1】

| | | | | | |
|-----|--|-----|--|-----|--|
| 415 | | 416 | | 417 | |
| 418 | | 419 | | 420 | |
| 421 | | 422 | | 423 | |
| 424 | | 425 | | 426 | |
| 427 | | 428 | | 429 | |
| 430 | | 431 | | 432 | |

【表 1 - 2】

| | | | | | |
|-----|---|-----|---|-----|---|
| 433 |  | 434 |  | 435 |  |
| 436 |  | 437 |  | 438 |  |
| 439 |  | 440 |  | 441 |  |
| 442 |  | 443 |  | 445 |  |
| 446 |  | 447 |  | 453 |  |

【表 1 - 3】

| | | | | | |
|-----|--|-----|--|-----|---|
| 454 |  | 455 |  | 456 |  |
| 457 |  | 458 |  | 459 |  |
| 460 |  | 461 |  | | |

【請求項 6】

以下の化合物または塩から選択される化合物。

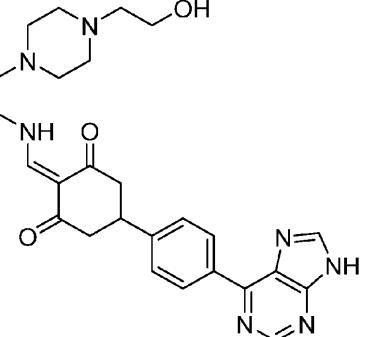
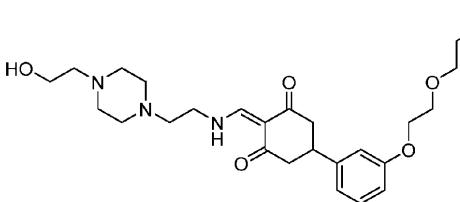
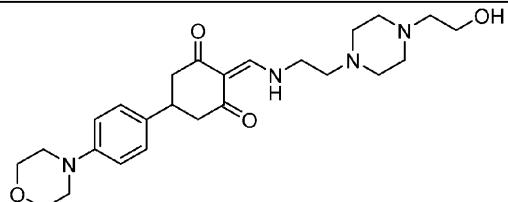
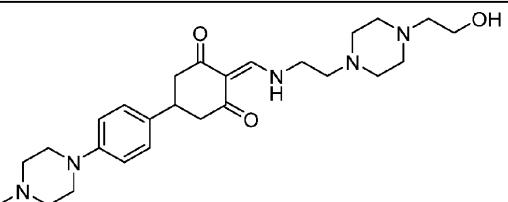
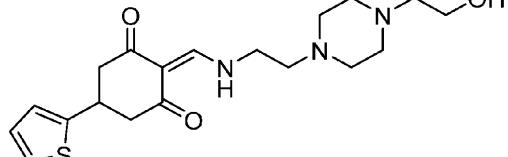
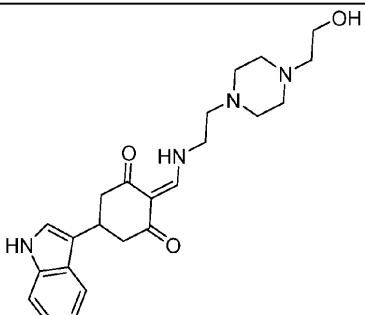
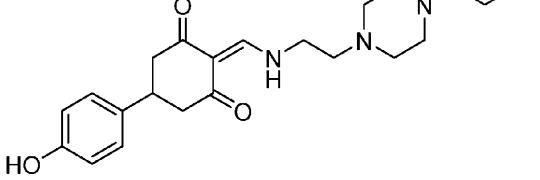
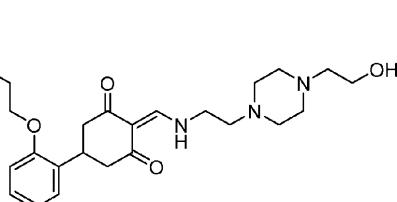
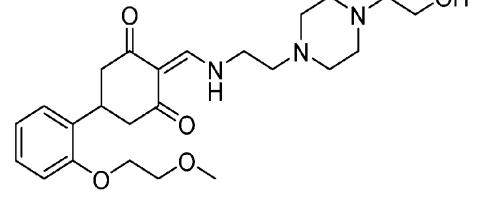
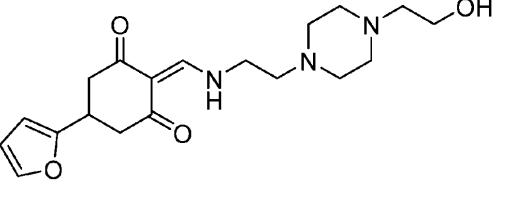
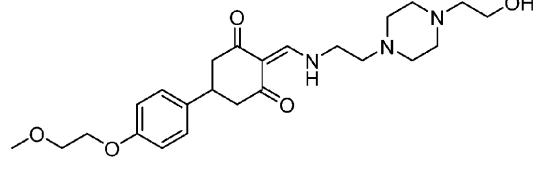
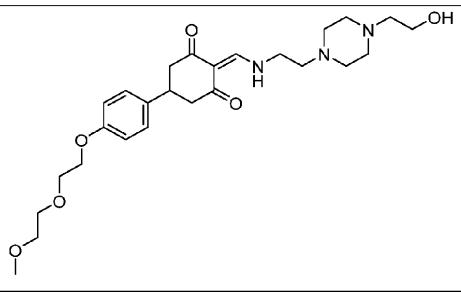
【表 2 - 1】

| | | | |
|----|--|----|--|
| 1 | | 4A | |
| 7 | | 8 | |
| 9 | | 10 | |
| 11 | | 12 | |
| 14 | | 15 | |
| 17 | | 18 | |
| 19 | | 20 | |

【表 2 - 2】

| | | | |
|----|--|----|--|
| 21 | | 22 | |
| 23 | | 24 | |
| 25 | | 26 | |
| 27 | | 28 | |
| 29 | | 30 | |
| 31 | | 32 | |

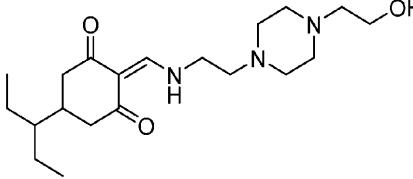
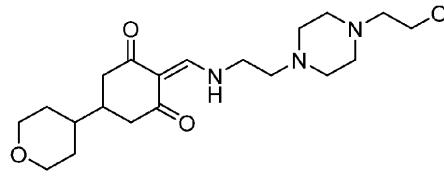
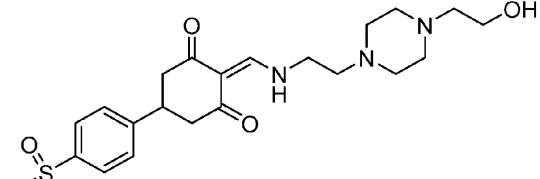
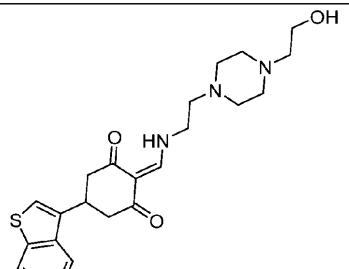
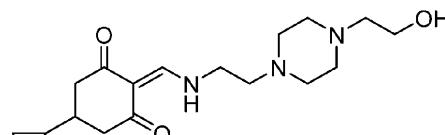
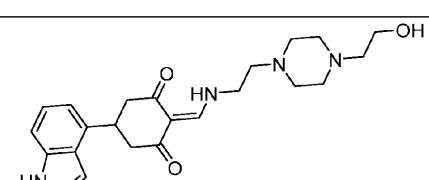
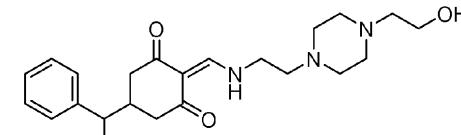
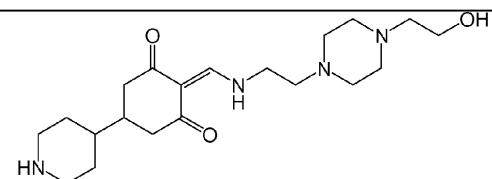
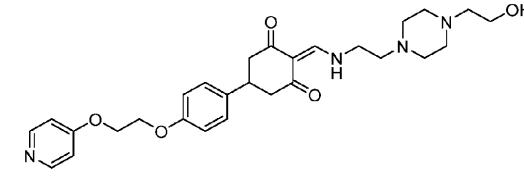
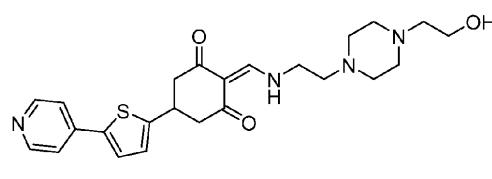
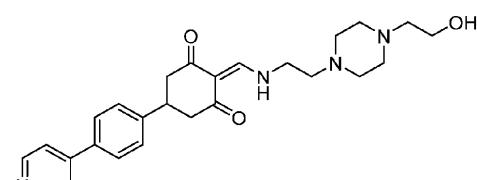
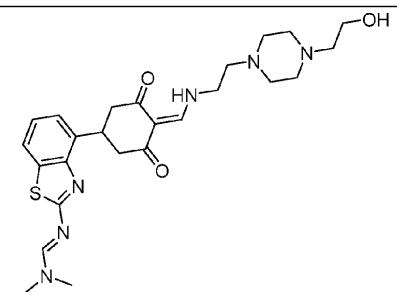
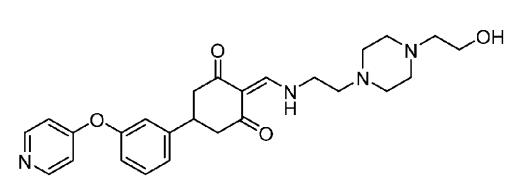
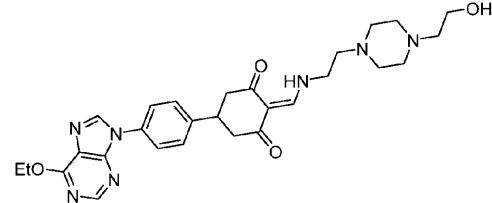
【表 2 - 3】

| | | | |
|----|---|----|--|
| 33 |  | 34 |  |
| 35 |  | 36 |  |
| 37 |  | 39 |  |
| 40 |  | 41 |  |
| 42 |  | 43 |  |
| 44 |  | 45 |  |

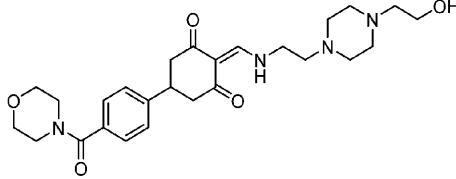
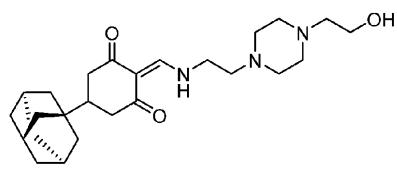
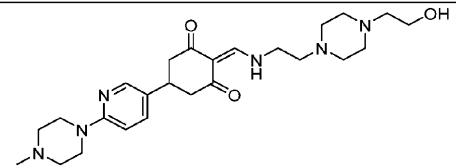
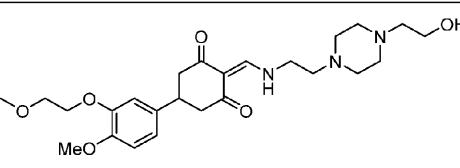
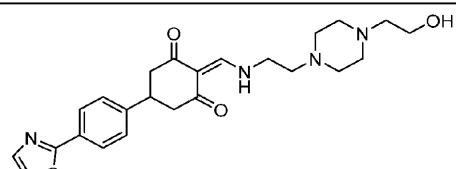
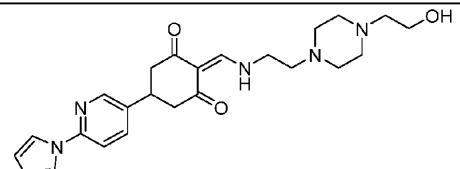
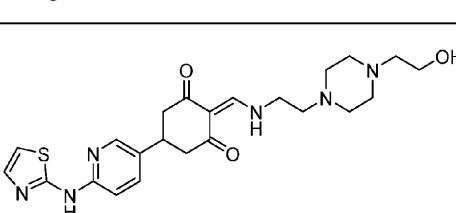
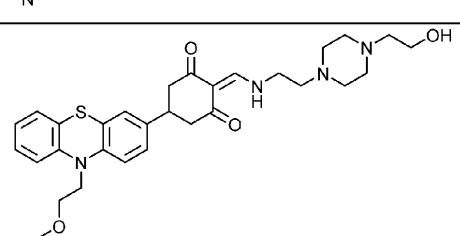
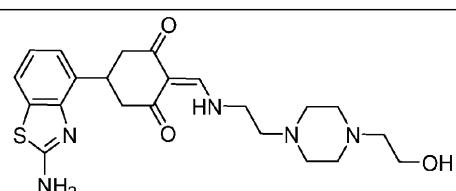
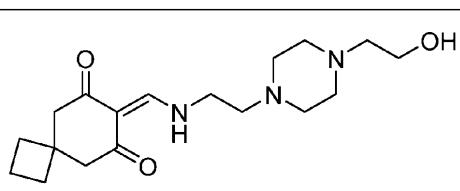
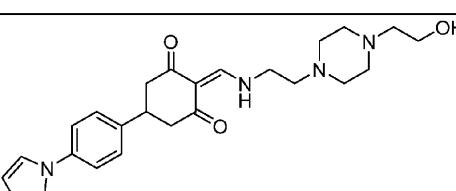
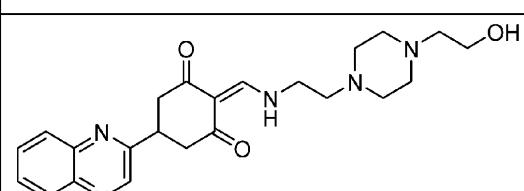
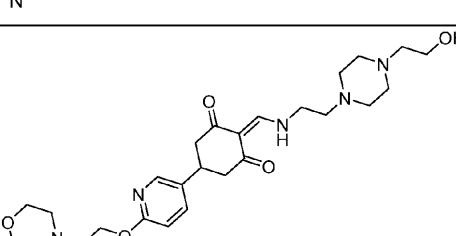
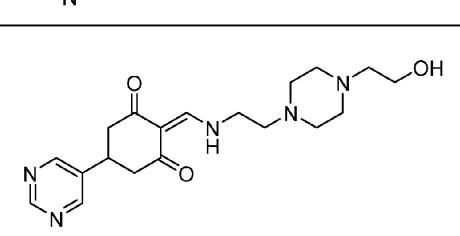
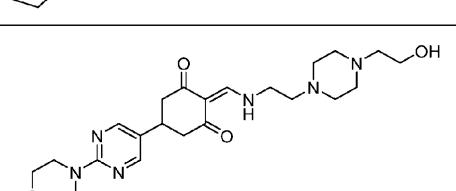
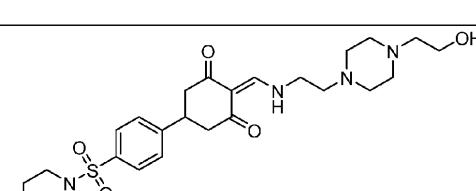
【表 2 - 4】

| | | | |
|----|--|----|--|
| 46 | | 47 | |
| 48 | | 49 | |
| 50 | | 51 | |
| 52 | | 53 | |
| 54 | | 55 | |
| 56 | | 57 | |
| 58 | | 59 | |
| 61 | | 62 | |

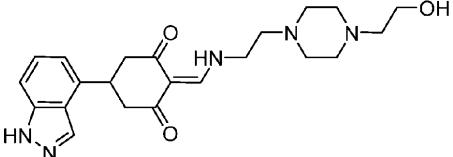
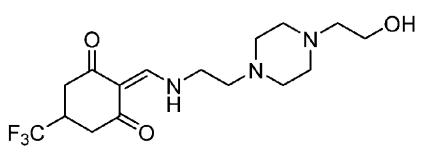
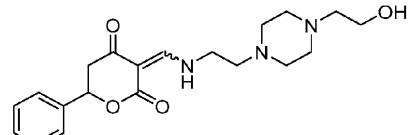
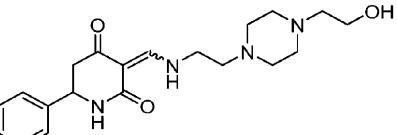
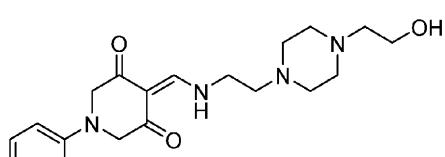
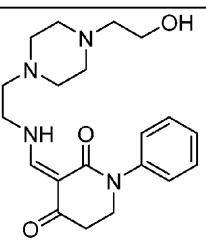
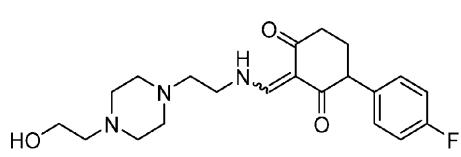
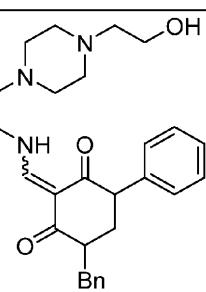
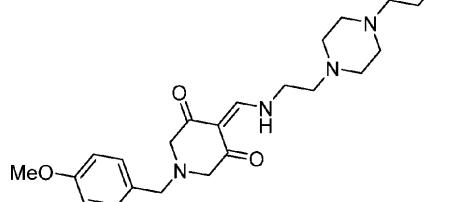
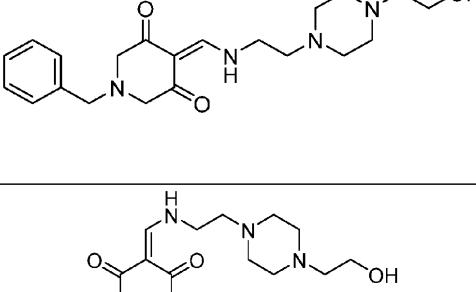
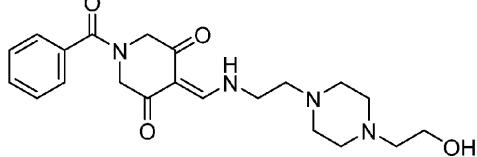
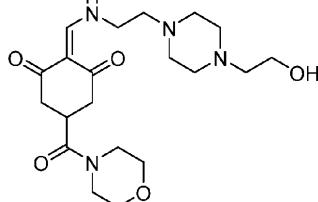
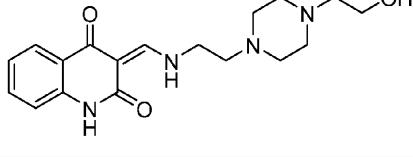
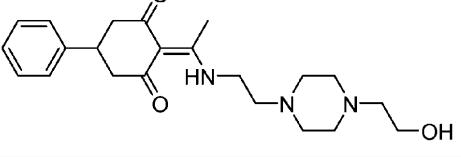
【表 2 - 5】

| | | | |
|----|---|----|--|
| 63 |  | 64 |  |
| 65 |  | 66 |  |
| 67 |  | 68 |  |
| 69 |  | 70 |  |
| 71 |  | 72 |  |
| 73 |  | 74 |  |
| 75 |  | 76 |  |

【表 2 - 6】

| | | | |
|----|---|----|--|
| 77 |  | 78 |  |
| 79 |  | 80 |  |
| 81 |  | 82 |  |
| 83 |  | 84 |  |
| 85 |  | 86 |  |
| 87 |  | 88 |  |
| 89 |  | 90 |  |
| 91 |  | 92 |  |

【表 2 - 7】

| | | | |
|-----|---|-----|--|
| 93 |  | 94 |  |
| 95 |  | 96 |  |
| 97 |  | 99 |  |
| 100 |  | 101 |  |
| 102 |  | 103 |  |
| 104 |  | 105 |  |
| 107 |  | 108 |  |

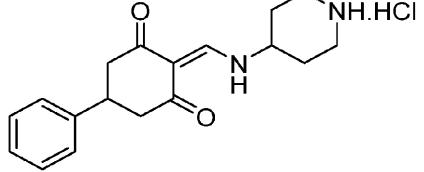
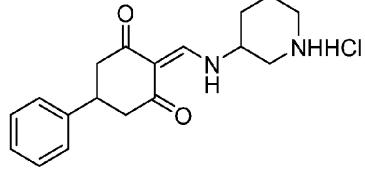
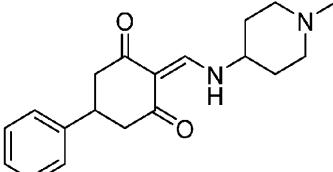
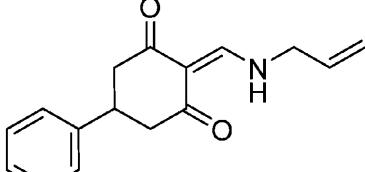
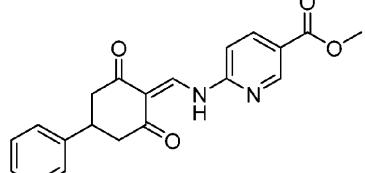
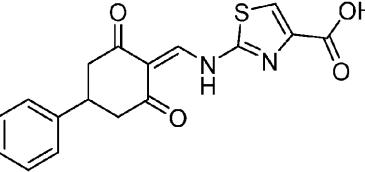
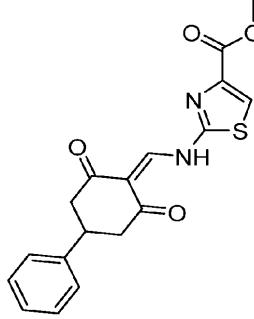
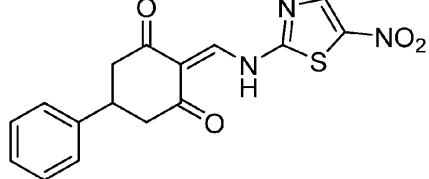
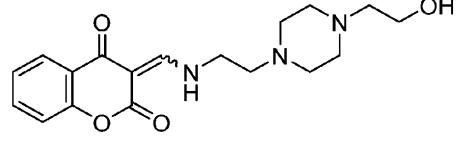
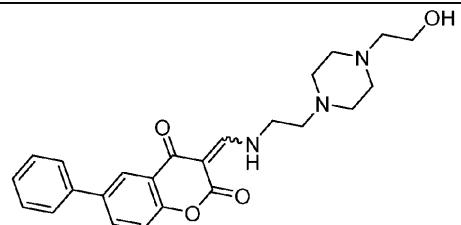
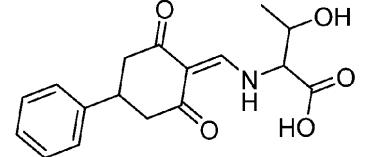
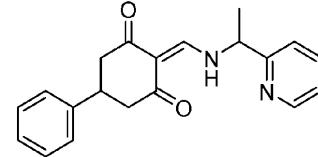
【表 2 - 8】

| | | | |
|-----|--|-----|--|
| 109 | | 110 | |
| 112 | | 113 | |
| 114 | | | |
| 115 | | 116 | |
| 119 | | 120 | |
| 121 | | 122 | |
| 123 | | 124 | |

【表 2 - 9】

| | | | |
|-----|--|-----|--|
| 125 | | 126 | |
| 127 | | 128 | |
| 129 | | 131 | |
| 132 | | 133 | |
| 134 | | 135 | |
| 136 | | 137 | |
| 138 | | 139 | |

【表 2 - 10】

| | | | |
|-----|---|-----|--|
| 140 |  | 141 |  |
| 142 |  | 143 |  |
| 145 |  | 146 |  |
| 147 |  | 148 |  |
| 149 |  | 150 |  |
| 155 |  | 156 |  |
| 158 |  | 160 |  |

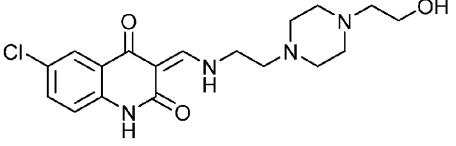
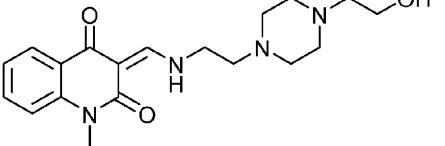
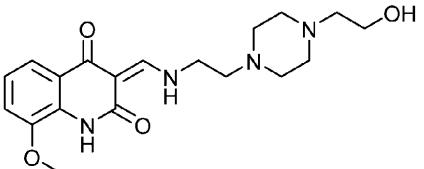
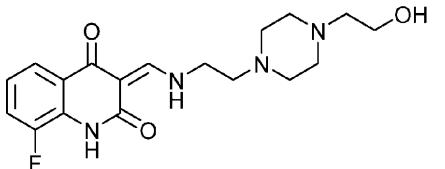
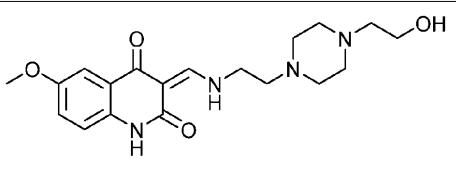
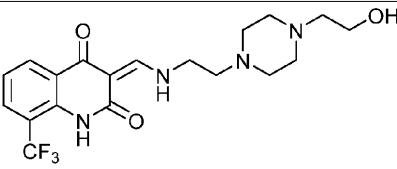
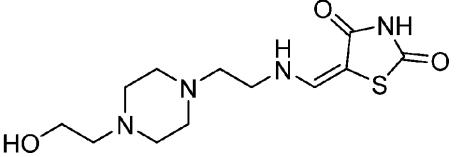
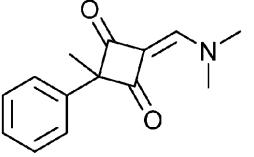
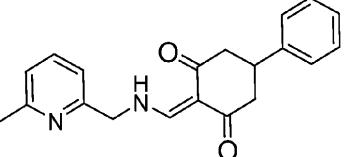
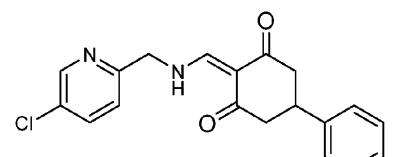
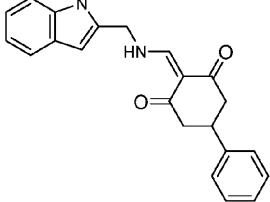
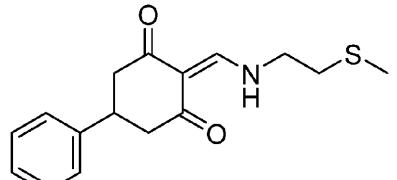
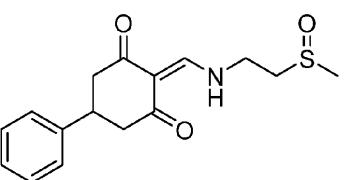
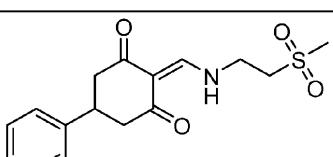
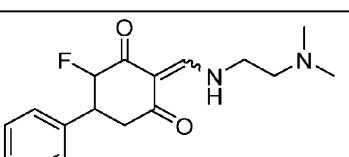
【表 2 - 11】

| | | | |
|-----|--|-----|--|
| 161 | | 162 | |
| 163 | | 164 | |
| 165 | | 169 | |
| 170 | | 171 | |
| 172 | | 173 | |
| 174 | | 175 | |
| 176 | | 177 | |

【表 2 - 1 2】

| | | | |
|-----|--|-----|--|
| 178 | | 180 | |
| 182 | | 183 | |
| 184 | | 185 | |
| 186 | | 187 | |
| 188 | | 189 | |
| 190 | | 191 | |

【表 2 - 1 3】

| | | | |
|-----|---|-----|---|
| 192 |  | 193 |  |
| 194 |  | 195 |  |
| 196 |  | 197 |  |
| 200 |  | 201 |  |
| 202 |  | 203 |  |
| 204 |  | 205 |  |
| 206 |  | 207 |  |
| 208 |  | 209 |  |

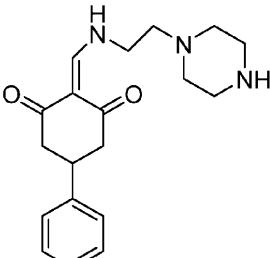
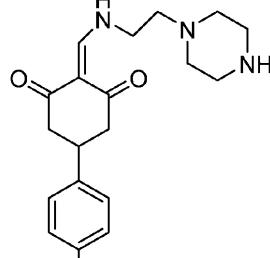
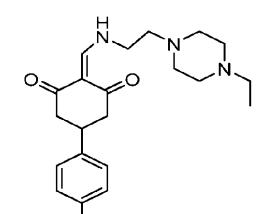
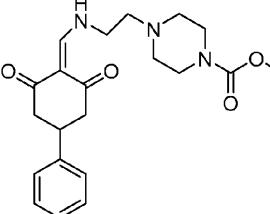
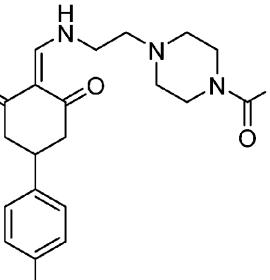
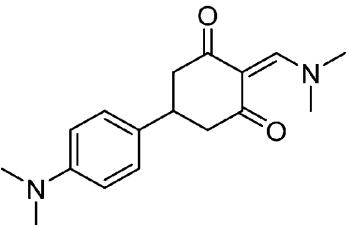
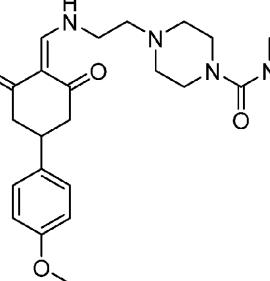
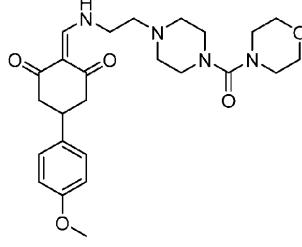
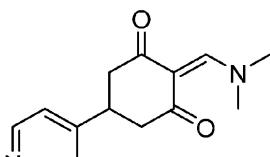
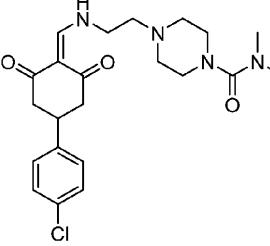
【表 2 - 1 4】

| | | | |
|-----|--|-----|--|
| 210 | | 211 | |
| 212 | | 213 | |
| 214 | | 215 | |
| 216 | | 217 | |
| 218 | | 219 | |
| 220 | | 221 | |

【表 2 - 1 5】

| | | | |
|-----|--|-----|--|
| 222 | | 223 | |
| 224 | | 225 | |
| 226 | | 227 | |
| 228 | | 229 | |
| 230 | | 231 | |
| 232 | | 233 | |

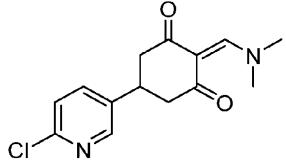
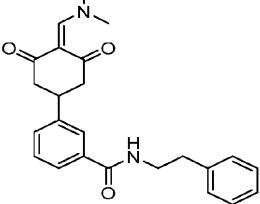
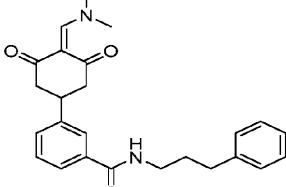
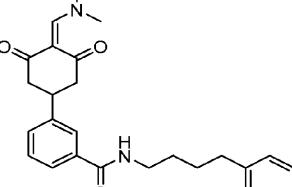
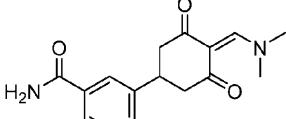
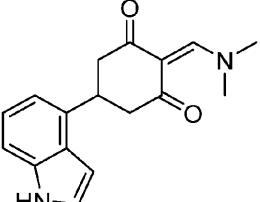
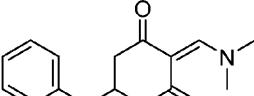
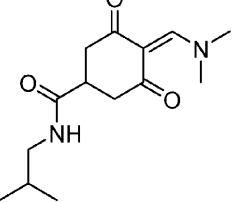
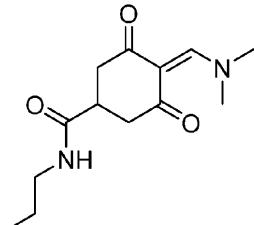
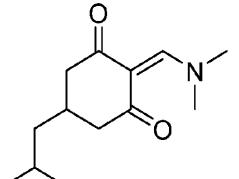
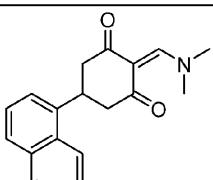
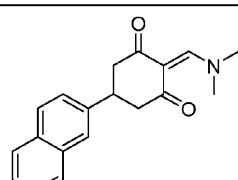
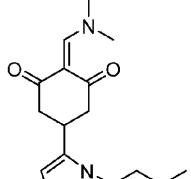
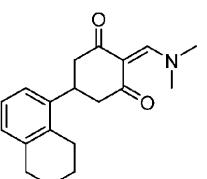
【表 2 - 1 6】

| | | | |
|-----|---|-----|---|
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| 238 |  | 239 |  |
| 240 |  | 242 |  |
| 245 |  | 246 |  |
| 247 |  | 248 |  |

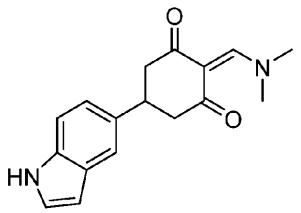
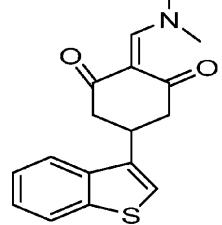
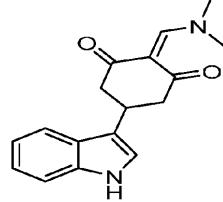
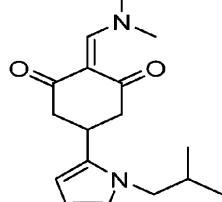
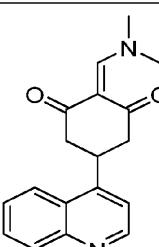
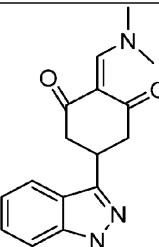
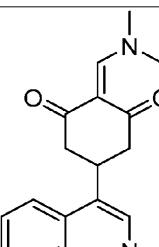
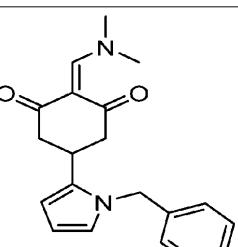
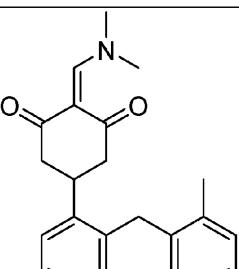
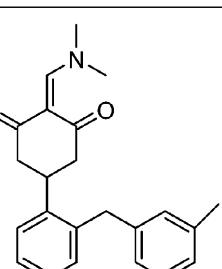
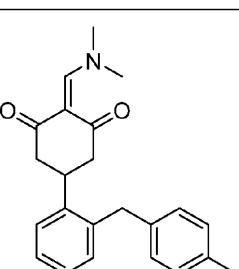
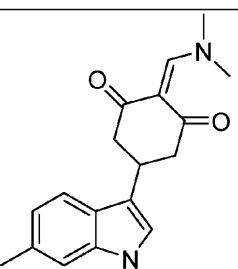
【表 2 - 17】

| | | | |
|-----|--|-----|--|
| 249 | | 251 | |
| 252 | | 253 | |
| 254 | | 255 | |
| 256 | | 257 | |
| 258 | | 259 | |
| 260 | | 262 | |
| 263 | | 265 | |

【表 2 - 1 8】

| | | | |
|-----|---|-----|---|
| 266 |  | 267 |  |
| 268 |  | 269 |  |
| 270 |  | 271 |  |
| 272 |  | 273 |  |
| 274 |  | 276 |  |
| 277 |  | 278 |  |
| 279 |  | 280 |  |

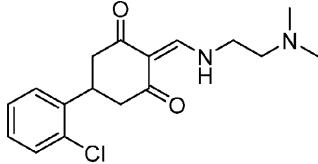
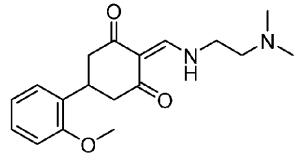
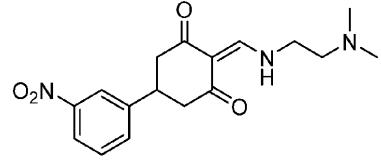
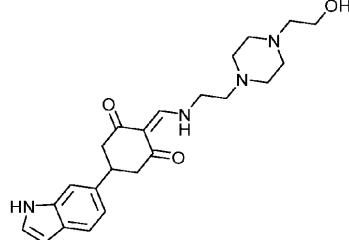
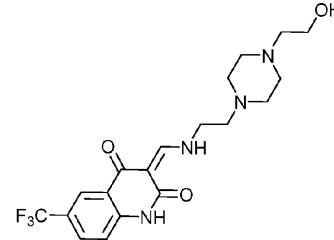
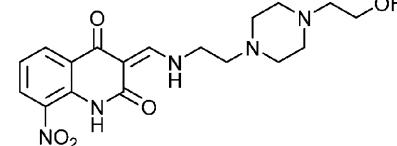
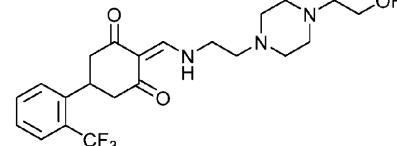
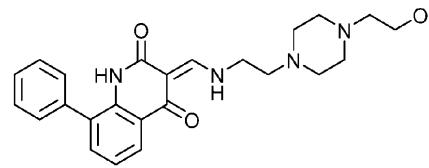
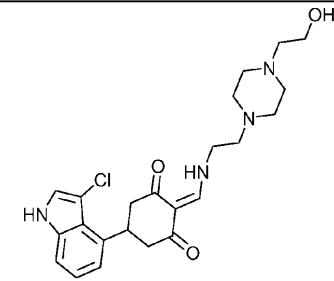
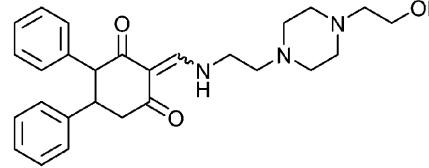
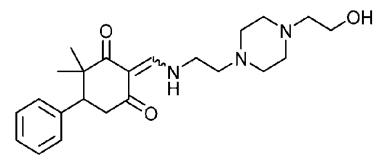
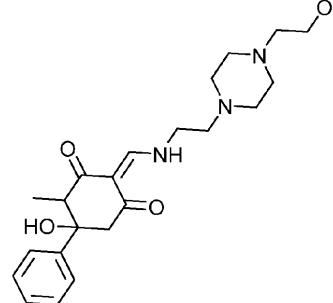
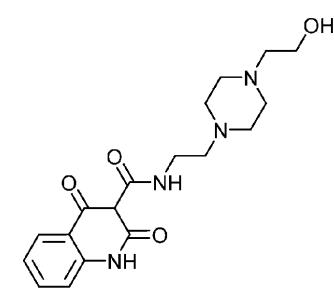
【表 2 - 19】

| | | | |
|-----|---|-----|---|
| 281 |  | 282 |  |
| 283 |  | 284 |  |
| 285 |  | 286 |  |
| 287 |  | 288 |  |
| 289 |  | 290 |  |
| 291 |  | 293 |  |

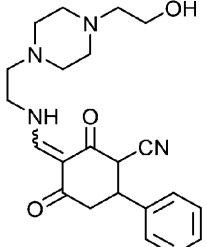
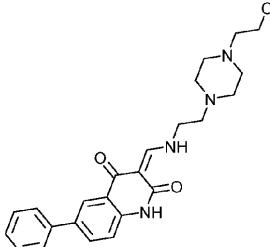
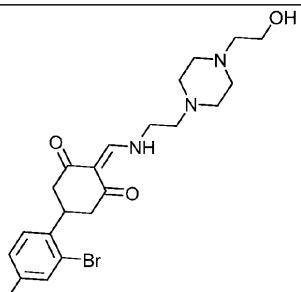
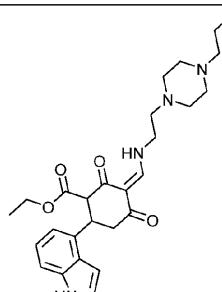
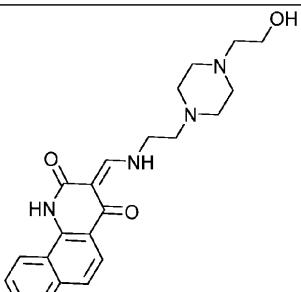
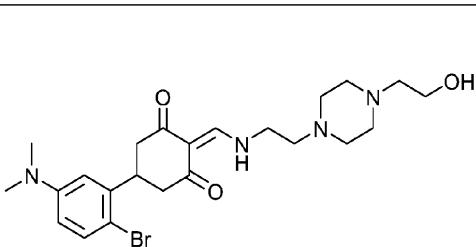
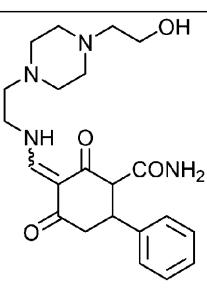
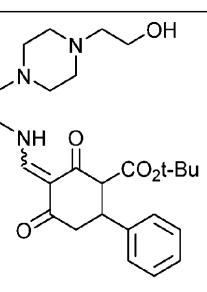
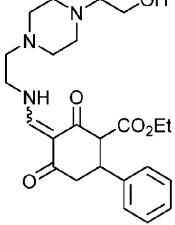
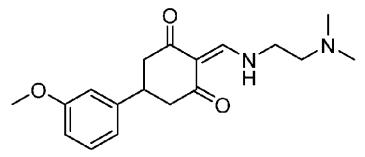
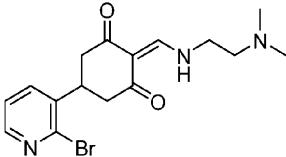
【表 2 - 20】

| | | | |
|-----|--|-----|--|
| 294 | | 295 | |
| 296 | | 297 | |
| 298 | | 299 | |
| 300 | | 301 | |
| 302 | | 303 | |
| 304 | | 305 | |
| 306 | | 307 | |

【表 2 - 21】

| | | | |
|-----|---|-----|--|
| 308 |  | 309 |  |
| 310 |  | 311 |  |
| 315 |  | 317 |  |
| 318 |  | 320 |  |
| 321 |  | 322 |  |
| 323 |  | 324 |  |
| 325 |  | 326 |  |

【表 2 - 2 2】

| | | | |
|-----|---|-----|---|
| 327 |  | 328 |  |
| 329 |  | 330 |  |
| 331 |  | 332 |  |
| 333 |  | 334 |  |
| 335 |  | 336 |  |
| 337 |  | 338 |  |

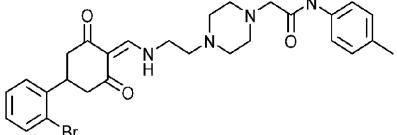
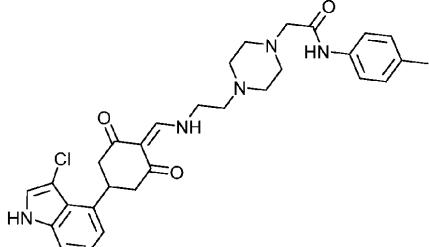
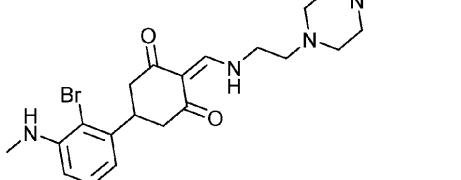
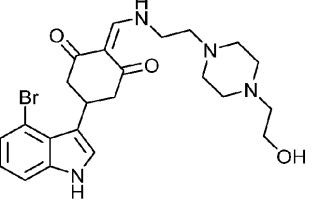
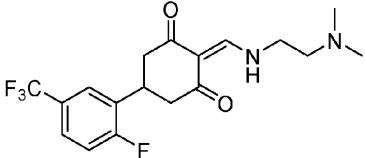
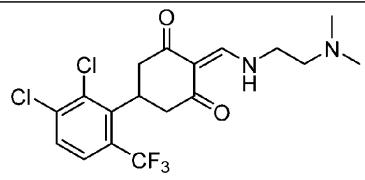
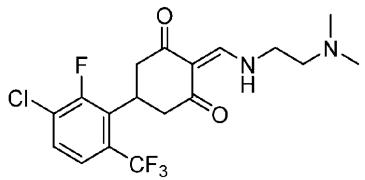
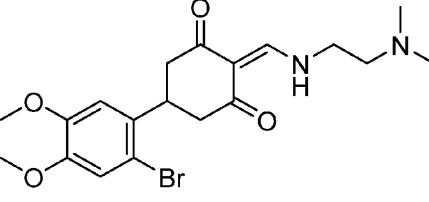
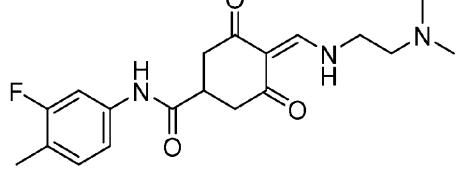
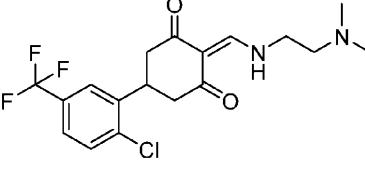
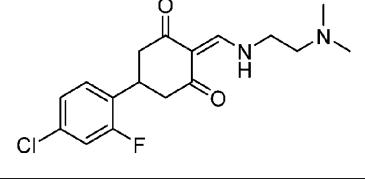
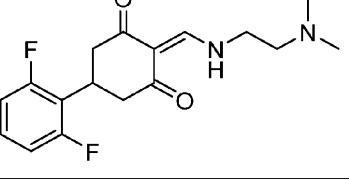
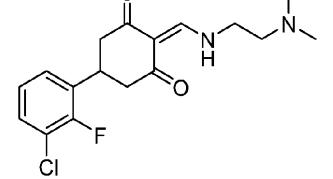
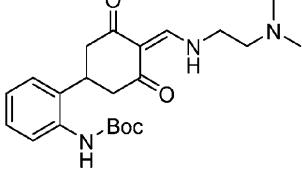
【表 2 - 2 3】

| | | | |
|-----|--|-----|--|
| 339 | | 340 | |
| 341 | | 342 | |
| 343 | | 344 | |
| 345 | | 346 | |
| 347 | | 349 | |
| 350 | | 351 | |
| 352 | | 353 | |
| 354 | | 355 | |

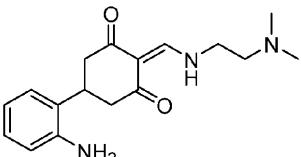
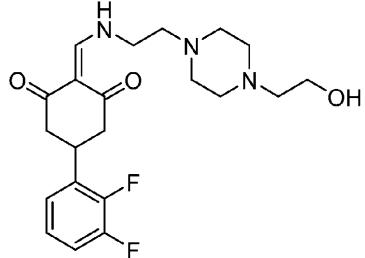
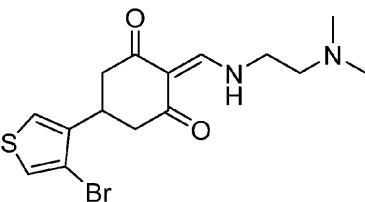
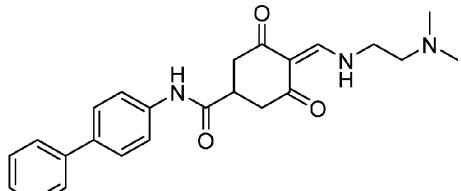
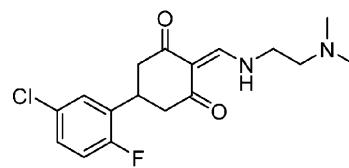
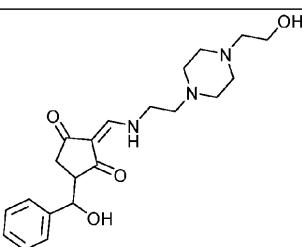
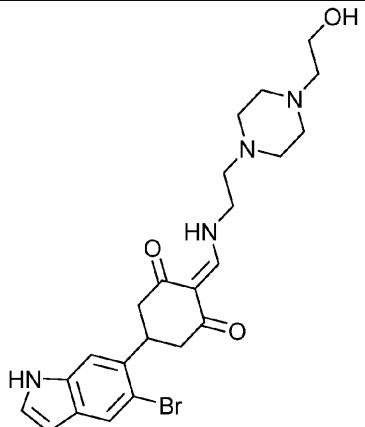
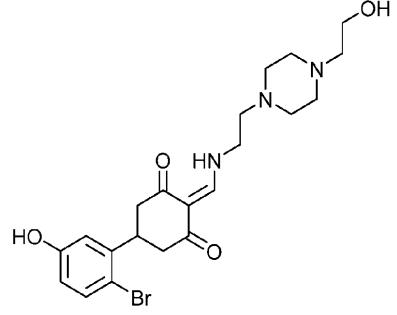
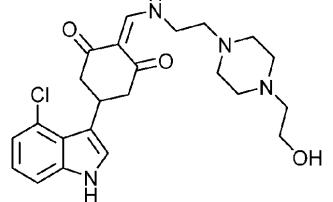
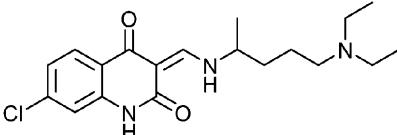
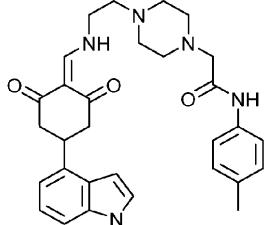
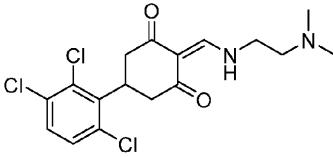
【表 2 - 2 4】

| | | | |
|-----|--|-----|--|
| 356 | | 357 | |
| 358 | | 359 | |
| 360 | | 361 | |
| 362 | | 363 | |
| 364 | | 365 | |
| 366 | | 367 | |
| 368 | | 369 | |
| 370 | | 371 | |

【表 2 - 25】

| | | | |
|-----|---|-----|---|
| 372 |  | 373 |  |
| 374 |  | 375 |  |
| 376 |  | 377 |  |
| 378 |  | 379 |  |
| 380 |  | 381 |  |
| 382 |  | 383 |  |
| 384 |  | 385 |  |

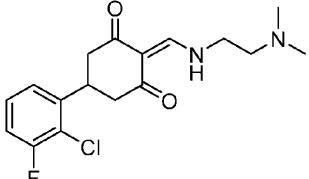
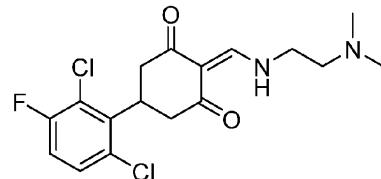
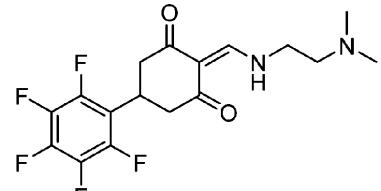
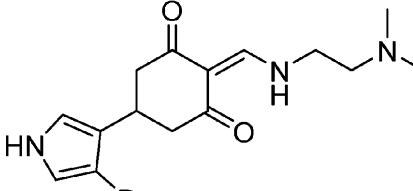
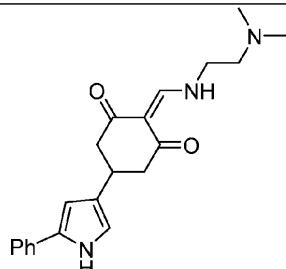
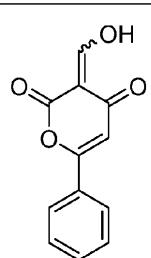
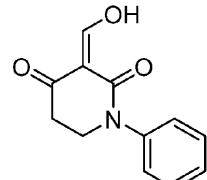
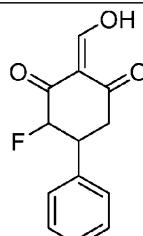
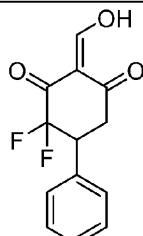
【表 2 - 26】

| | | | |
|-----|---|-----|--|
| 386 |  | 387 |  |
| 388 |  | 389 |  |
| 390 |  | 391 |  |
| 392 |  | 393 |  |
| 394 |  | 395 |  |
| 396 |  | 397 |  |

【表 2 - 27】

| | | | |
|-----|--|-----|--|
| 398 | | 399 | |
| 400 | | 401 | |
| 402 | | 403 | |
| 404 | | 405 | |
| 406 | | 407 | |
| 408 | | 409 | |

【表 2 - 28】

| | | | |
|-----|---|-----|---|
| 410 |  | 411 |  |
| 412 |  | 413 |  |
| 414 |  | 448 |  |
| 450 |  | 451 |  , and |
| 452 |  | | |

【請求項 7】

請求項 1 ~ 6 のいずれか一項に記載の化合物、またはその薬学的に許容される塩、を含む医薬組成物。

【請求項 8】

細胞におけるオートファジーを調節するための医薬の製造における請求項 1 ~ 6 のいずれか一項に記載の化合物、またはその薬学的に許容される塩、の使用。