The antibodies of the invention block prolactin receptor-mediated signaling.
1. Antibody 006-H08 or defined maturated variants thereof according to table 5 or antigen-binding fragments thereof which antagonize prolactin receptor-mediated signaling.

2. Antibody 006-H08 or antigen-binding fragment thereof according to claim 1 comprising the CDRs of the antibody of claim 1, whereby
   a. the variable heavy chain contains the CDR sequences corresponding to Seq ID No: 1, 7 and 13 and the variable light chain contains the CDR sequences corresponding to Seq ID No: 18, 24, and 29, or
   b. the variable heavy chain contains the CDR sequences corresponding to Seq ID No: 1, 74, 13, and the variable light chain contains the CDR sequences corresponding to Seq ID No: 78, 24, 90; or
   c. the variable heavy chain contains the CDR sequences corresponding to Seq ID No: 1, 75, 13, and the variable light chain contains the CDR sequences corresponding to Seq ID No: 82, 24, 91; or
   d. the variable heavy chain contains the CDR sequences corresponding to Seq ID No: 1, 7, 13, and the variable light chain contains the CDR sequences corresponding to Seq ID No: 82, 24, 29; or
   e. the variable heavy chain contains the CDR sequences corresponding to Seq ID No: 1, 7, 13, and the variable light chain contains the CDR sequences corresponding to Seq ID No: 86, 24, 29; or
   f. the variable heavy chain contains the CDR sequences corresponding to Seq ID No: 1, 74, 13, and the variable light chain contains the CDR sequences corresponding to Seq ID No: 87, 24, 100; or
   g. the variable heavy chain contains the CDR sequences corresponding to Seq ID No: 1, 74, 13, and the variable light chain contains the CDR sequences corresponding to Seq ID No: 87, 24, 92; or
   h. the variable heavy chain contains the CDR sequences corresponding to Seq ID No: 1, 74, 13, and the variable light chain contains the CDR sequences corresponding to Seq ID No: 89, 24, 93; or
   i. the variable heavy chain contains the CDR sequences corresponding to Seq ID No: 1, 74, 13, and the variable light chain contains the CDR sequences corresponding to Seq ID No: 79, 24, 101; or
j. the variable heavy chain contains the CDR sequences corresponding to
SEQ ID NO: 1, 76, 13, and the variable light chain contains the CDR
sequences corresponding to SEQ ID NO: 89, 24, 90; or

k. the variable heavy chain contains the CDR sequences corresponding to
SEQ ID NO: 1, 7, 13, and the variable light chain contains the CDR
sequences corresponding to SEQ ID NO: 18, 24, 100; or

l. the variable heavy chain contains the CDR sequences corresponding to
SEQ ID NO: 1, 7, 13, and the variable light chain contains the CDR
sequences corresponding to SEQ ID NO: 18, 24, 97; or

m. the variable heavy chain contains the CDR sequences corresponding to
SEQ ID NO: 1, 7, 13, and the variable light chain contains the CDR
sequences corresponding to SEQ ID NO: 18, 24, 98; or

n. the variable heavy chain contains the CDR sequences corresponding to
SEQ ID NO: 1, 74, 13, and the variable light chain contains the CDR
sequences corresponding to SEQ ID NO: 83, 24, 99; or

o. the variable heavy chain contains the CDR sequences corresponding to
SEQ ID NO: 1, 7, 13, and the variable light chain contains the CDR
sequences corresponding to SEQ ID NO: 18, 24, 96; or

p. the variable heavy chain contains the CDR sequences corresponding to
SEQ ID NO: 1, 7, 13, and the variable light chain contains the CDR
sequences corresponding to SEQ ID NO: 18, 24, 94; or

q. the variable heavy chain contains the CDR sequences corresponding to
SEQ ID NO: 1, 74, 13, and the variable light chain contains the CDR
sequences corresponding to SEQ ID NO: 88, 24, 90; or

r. the variable heavy chain contains the CDR sequences corresponding to
SEQ ID NO: 1, 74, 13, and the variable light chain contains the CDR
sequences corresponding to SEQ ID NO: 81, 24, 95; or

s. the variable heavy chain contains the CDR sequences corresponding to
SEQ ID NO: 1, 75, 13, and the variable light chain contains the CDR
sequences corresponding to SEQ ID NO: 18, 24, 29; or

t. the variable heavy chain contains the CDR sequences corresponding to
SEQ ID NO: 1, 77, 13, and the variable light chain contains the CDR
sequences corresponding to SEQ ID NO: 18, 24, 29; or

u. the variable heavy chain contains the CDR sequences corresponding to
SEQ ID NO: 1, 7, 13, and the variable light chain contains the CDR
sequences corresponding to SEQ ID NO: 80, 24, 29; or
v. the variable heavy chain contains the CDR sequences corresponding to
SEQ ID NO: 1, 7, 13, and the variable light chain contains the CDR
sequences corresponding to SEQ ID NO: 85, 24, 29; or
w. the variable heavy chain contains the CDR sequences corresponding to
SEQ ID NO: 1, 7, 13, and the variable light chain contains the CDR
sequences corresponding to SEQ ID NO: 84, 24, 29.

3. Antibody or antigen-binding fragment according to claim 1 to 2, whereby the
antibody

a. 006-H08 comprises a variable heavy chain domain corresponding to a
nucleic acid sequence according to SEQ ID NO: 46, and an amino acid
sequence according to SEQ ID NO: 34, and a variable light chain domain
with a nucleic acid sequence according to SEQ ID NO: 52, and an amino acid
sequence according to SEQ ID NO: 40,
b. 006-H08-12-2 comprises a variable heavy chain domain corresponding
to a nucleic acid sequence according to SEQ ID NO: 331, and an amino acid
sequence according to SEQ ID NO: 353, and a variable light chain
domain with a nucleic acid sequence according to SEQ ID NO: 165, and
an amino acid sequence according to SEQ ID NO: 143,
c. 006-H08-13-2 comprises a variable heavy chain domain corresponding
to a nucleic acid sequence according to SEQ ID NO: 332, and an amino acid
sequence according to SEQ ID NO: 354, and a variable light chain
domain with a nucleic acid sequence according to SEQ ID NO: 166, and
an amino acid sequence according to SEQ ID NO: 144,
d. 006-H08-13-6-1 comprises a variable heavy chain domain corresponding
to a nucleic acid sequence according to SEQ ID NO: 333, and an amino acid
sequence according to SEQ ID NO: 355, and a variable light chain
domain with a nucleic acid sequence according to SEQ ID NO: 167, and
an amino acid sequence according to SEQ ID NO: 145,
e. 006-H08-14-6-0 comprises a variable heavy chain domain corresponding
to a nucleic acid sequence according to SEQ ID NO: 334, and an amino acid
sequence according to SEQ ID NO: 356, and a variable light chain
domain with a nucleic acid sequence according to SEQ ID NO: 168, and
an amino acid sequence according to SEQ ID NO: 146,
f. 006-H08-15-5 comprises a variable heavy chain domain corresponding
to a nucleic acid sequence according to SEQ ID NO: 335, and an amino
acid sequence according to SEQ ID NO: 357, and a variable light chain
domain with a nucleic acid sequence according to SEQ ID NO: 169, and
an amino acid sequence according to SEQ ID NO: 147,
g. 006-H08-19-1 comprises a variable heavy chain domain corresponding
to a nucleic acid sequence according to SEQ ID NO: 336, and an amino
acid sequence according to SEQ ID NO: 358, and a variable light chain
domain with a nucleic acid sequence according to SEQ ID NO: 170, and
an amino acid sequence according to SEQ ID NO: 148,
h. 006-H08-29-1 comprises a variable heavy chain domain corresponding
to a nucleic acid sequence according to SEQ ID NO: 337, and an amino
acid sequence according to SEQ ID NO: 359, and a variable light chain
domain with a nucleic acid sequence according to SEQ ID NO: 171, and
an amino acid sequence according to SEQ ID NO: 149,
i. 006-H08-32-2 comprises a variable heavy chain domain corresponding
to a nucleic acid sequence according to SEQ ID NO: 338, and an amino
acid sequence according to SEQ ID NO: 360, and a variable light chain
domain with a nucleic acid sequence according to SEQ ID NO: 172, and
an amino acid sequence according to SEQ ID NO: 150,
j. 006-H08-33-0 comprises a variable heavy chain domain corresponding
to a nucleic acid sequence according to SEQ ID NO: 339, and an amino
acid sequence according to SEQ ID NO: 361, and a variable light chain
domain with a nucleic acid sequence according to SEQ ID NO: 173, and
an amino acid sequence according to SEQ ID NO: 151,
k. 006-H08-33-16-0 comprises a variable heavy chain domain
corresponding to a nucleic acid sequence according to SEQ ID NO: 340,
and an amino acid sequence according to SEQ ID NO: 362, and a
variable light chain domain with a nucleic acid sequence according to
SEQ ID NO: 174, and an amino acid sequence according to SEQ ID NO:
152,
l. 006-H08-35-17-1 comprises a variable heavy chain domain
corresponding to a nucleic acid sequence according to SEQ ID NO: 341,
and an amino acid sequence according to SEQ ID NO: 363, and a
variable light chain domain with a nucleic acid sequence according to
SEQ ID NO: 175, and an amino acid sequence according to SEQ ID NO:
153,
m. 006-H08-35-17-4 comprises a variable heavy chain domain corresponding to a nucleic acid sequence according to SEQ ID NO: 342, and an amino acid sequence according to SEQ ID NO: 364, and a variable light chain domain with a nucleic acid sequence according to SEQ ID NO: 176, and an amino acid sequence according to SEQ ID NO: 154,

n. 006-H08-35-1 comprises a variable heavy chain domain corresponding to a nucleic acid sequence according to SEQ ID NO: 343, and an amino acid sequence according to SEQ ID NO: 365, and a variable light chain domain with a nucleic acid sequence according to SEQ ID NO: 177, and an amino acid sequence according to SEQ ID NO: 155,

o. 006-H08-36-17-0 comprises a variable heavy chain domain corresponding to a nucleic acid sequence according to SEQ ID NO: 344, and an amino acid sequence according to SEQ ID NO: 366, and a variable light chain domain with a nucleic acid sequence according to SEQ ID NO: 178, and an amino acid sequence according to SEQ ID NO: 156,

p. 006-H08-37-19-0 comprises a variable heavy chain domain corresponding to a nucleic acid sequence according to SEQ ID NO: 345, and an amino acid sequence according to SEQ ID NO: 367, and a variable light chain domain with a nucleic acid sequence according to SEQ ID NO: 179, and an amino acid sequence according to SEQ ID NO: 157,

q. 006-H08-39-7 comprises a variable heavy chain domain corresponding to a nucleic acid sequence according to SEQ ID NO: 346, and an amino acid sequence according to SEQ ID NO: 368, and a variable light chain domain with a nucleic acid sequence according to SEQ ID NO: 180, and an amino acid sequence according to SEQ ID NO: 158,

r. 006-H08-48-5 comprises a variable heavy chain domain corresponding to a nucleic acid sequence according to SEQ ID NO: 347, and an amino acid sequence according to SEQ ID NO: 369, and a variable light chain domain with a nucleic acid sequence according to SEQ ID NO: 181, and an amino acid sequence according to SEQ ID NO: 159,

s. 006-H08-53-27-0 comprises a variable heavy chain domain corresponding to a nucleic acid sequence according to SEQ ID NO: 348, and an amino acid sequence according to SEQ ID NO: 370, and a
variable light chain domain with a nucleic acid sequence according to SEQ ID NO: 182, and an amino acid sequence according to SEQ ID NO: 160,

t. 006-H08-59-30-0 comprises a variable heavy chain domain corresponding to a nucleic acid sequence according to SEQ ID NO: 349, and an amino acid sequence according to SEQ ID NO: 371, and a variable light chain domain with a nucleic acid sequence according to SEQ ID NO: 183, and an amino acid sequence according to SEQ ID NO: 161,

u. 006-H08-63-32-4 comprises a variable heavy chain domain corresponding to a nucleic acid sequence according to SEQ ID NO: 350, and an amino acid sequence according to SEQ ID NO: 372, and a variable light chain domain with a nucleic acid sequence according to SEQ ID NO: 184, and an amino acid sequence according to SEQ ID NO: 162,

v. 006-H08-65-33-2 comprises a variable heavy chain domain corresponding to a nucleic acid sequence according to SEQ ID NO: 351, and an amino acid sequence according to SEQ ID NO: 373, and a variable light chain domain with a nucleic acid sequence according to SEQ ID NO: 185, and an amino acid sequence according to SEQ ID NO: 163,

w. 006-H08-68-35-2 comprises a variable heavy chain domain corresponding to a nucleic acid sequence according to SEQ ID NO: 352, and an amino acid sequence according to SEQ ID NO: 374, and a variable light chain domain with a nucleic acid sequence according to SEQ ID NO: 186, and an amino acid sequence according to SEQ ID NO: 164.

4. Antibody according to claim 1 to 3, whereby the antibody consists of an antigen-binding region that binds specifically to or has a high affinity of for one or more regions of PRLR, whose amino acid sequence is depicted by SEQ ID NO: 70 and human polymorphic variants of SEQ ID NO: 70, amino acid position 1 to 210, whereby the affinity is at least 100 nM, preferably less than about 100 nM, more preferably less than about 30 nM, even more preferred with an affinity of less than about 10 nM, or even more preferred with an affinity of less than 1 nM.
5. Antibody of claim 1 to 4 wherein the heavy constant is a modified or unmodified 
IgG1, IgG2, IgG3 or IgG4.

6. An isolated nucleic acid sequence encoding an antibody or antigen-binding 
fragment according to any of the claims 1 to 5.

7. An isolated nucleic acid sequence according to claim 6, whereby the nucleic 
acid sequences are according to table 5.

8. Expression vector comprising a nucleic acid sequence of claim 6 and 7.

9. Host cell comprising the vector of claim 8 or a nucleic acid molecule of claim 6 
and 7, whereby the host cell can be a higher eukaryotic host cell, such as a 
mammalian cell, a lower eukaryotic host cell, such as a yeast cell, and may be a 
prokaryotic cell, such as a bacterial cell.

10. A method of using the host cell of claim 9 to produce an antibody or antigen- 
binding fragment, comprising culturing the host cell of claim under suitable 
conditions and recovering said antibody.

11. An antibody or antigen-binding fragment produced by the method of claim 10.

12. An antibody or antigen-binding fragment of any of claims 1 to 5 that is purified to 
at least 95% homogeneity by weight.

13. An antibody or antigen-binding fragment according to claims 1 to 5 as a 
medicament.

14. A pharmaceutical composition comprising the antibody or antigen-binding 
fragment according to claim 1 to 5 and a pharmacetically acceptable carrier 
comprising excipients and auxiliaries.

15. Kits comprising an antibody of claim 1 to 5 comprising a therapeutically effective 
amount of antibody 006-H08 or maturated variants thereof, packaged in a
container, said kit optionally containing a second therapeutic agent, and further comprising a label attached to or packaged with the container, the label describing the contents of the container and providing indications and/or instructions regarding the use of the contents of the container to treat endometriosis, adenomyosis, benign breast disease and mastalgia, lactation inhibition, hyper- and normoprolactinemic hair loss, benign prostate hyperplasia, fibroids or for use in non-hormonal female contraception or to treat women under combined hormone therapy (i.e. estrogen plus progestin therapy) to inhibit mammary epithelial cell proliferation.

16. Antibody or antigen-binding fragment according to claim 1 to 5 for the treatment and/or prevention of endometriosis and adenomyosis (endometriosis interna).

17. Antibody or antigen-binding fragment according to claim 1 to 5 for female contraception.

18. Antibody or antigen-binding fragment according to claim 1 to 5 for the treatment of benign breast disease and mastalgia.

19. Antibody or antigen-binding fragment according to claim 1 to 5 for the inhibition of lactation.

20. Antibody or antigen-binding fragment according to claim 1 to 5 for the treatment of benign prostate hyperplasia.

21. Antibody or antigen-binding fragment according to claim 1 to 5 for the treatment of hyper- and normoprolactinemic hair loss.

22. Antibody or antigen-binding fragment according to claim 1 to 5 for the treatment of women receiving combined hormone therapy.

23. Use of an antibody or antigen-binding fragment according to claim 22, whereby the combined hormone therapy is an estrogen plus progestin therapy.
24. Use of the antibodies according to claim 1 to 5 or in form of a pharmaceutical composition according to claim 14 comprising PRLR antibodies or antigen-binding fragment according to claim 1 to 5 for parenteral administration, whereby methods of parenteral delivery include topical, intra-arterial, intramuscular, subcutaneous, intramedullary, intrathecal, intraventricular, intravenous, intraperitoneal, intrauterine, vaginal, or intranasal administration.

25. Pharmaceutical composition according to claim 14 comprising PRLR antibodies or antigen-binding fragment according to claim 1 to 5, in combination with at least one other agent.