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(54) Title: MUCOSAL GENE SIGNATURES

(57) Abstract: Infliximab (IFX) is effective treatment for Crohn's disease (CD) and ulcerative colitis (UC) not responding to stan-  
dard therapy. 30-40% of patients do not improve and response is often incomplete. The aim of this study is to identify mucosal  
gene signatures predictive of response to EFX using high-density oligonucleotide arrays. Eight UC patients and 12 CD patients  
showed healing. In UC, only one probe set was differentially expressed in responders compared with non-responders, ie IL-13R-  
alpha2. At PAM analysis 2 probe sets, representing IL-13Ralpha2 and IL-1, separated IBD responders from non-responders with  
an overall misclassification error rate of 0.046 (2/43), with 100% sensitivity and 91.3 % specificity. The IL-13Ralpha2 probe set  
was a top-ranked probe set in all our analyses using both LIMMA and PAM strategies. Our gene array studies of mucosal biopsies  
identified IL-13Ralpha2 in IBD as a predictor of (non-)response to IFX.



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# INTERNATIONAL SEARCH REPORT

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<b>A. CLASSIFICATION OF SUBJECT MATTER</b> INV. C12Q1/68 ADD.		
According to International Patent Classification (IPC) or to both national classification and IPC		
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, BIOSIS, MEDLINE, EMBASE, WPI Data		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2008/028044 A2 (CENTOCOR INC [US]; LI XILIN [US]; SONG XIAO-YU [US]) 6 March 2008 (2008-03-06) page 25 - pages 31,39; example 1; table 1 -----	1-15
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A	EP 1 172 444 A1 (CONARIS RES INST GMBH [DE]) 16 January 2002 (2002-01-16) the whole document -----	1-15
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <span style="margin-left: 100px;"><input checked="" type="checkbox"/> See patent family annex.</span>		
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer  Botz, Jürgen	

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Information on patent family members

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