abcam

Product datasheet

Anti-IL-4R antibody ab203398

<u>3 References</u> 4 Images

Overview			
Product name	Anti-IL-4R antibody		
Description	Rabbit polyclonal to IL-4R		
Host species	Rabbit		
Tested applications	Suitable for: ICC/IF, Flow Cyt, IHC-P		
Species reactivity	Reacts with: Human		
Immunogen	Synthetic peptide within Human IL-4R aa 200-300 conjugated to keyhole limpet haemocyanin. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please <u>contact</u> our Scientific Support team to discuss your requirements. Database link: <u>P24394</u>		
Desitive control	Run BLAST with Image: Second		
Positive control	IHC-P: Human colon carcinoma tissue. ICC/IF: A431 cells Flow Cyt: Raji cells		
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.		
	If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As		

Dro	nortice
Pro	perties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Proclin 300 Constituents: 50% Glycerol (glycerin, glycerine), 1% BSA, 48.98% TBS, 1X
	Aqueous buffered solution
Purity	Protein A purified

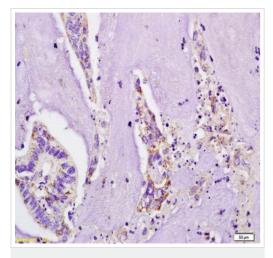
Applications

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab203398 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

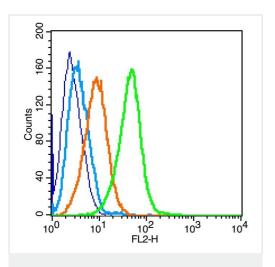
Application	Abreviews	Notes
ICC/IF		Use at an assay dependent concentration.
Flow Cyt		1/20 - 1/100. <u>ab171870</u> - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.
IHC-P		1/100 - 1/500. When using a fluorescent probe the recommended dilution is 1/50 – 1/200.

Target		
Function	Receptor for both interleukin 4 and interleukin 13. Couples to the JAK1/2/3-STAT6 pathway. The IL4 response is involved in promoting Th2 differentiation. The IL4/IL13 responses are involved in regulating IgE production and, chemokine and mucus production at sites of allergic inflammmation. In certain cell types, can signal through activation of insulin receptor substrates, IRS1/IRS2. Soluble IL4R (sIL4R) inhibits IL4-mediated cell proliferation and IL5 up-regulation by T-cells.	
Tissue specificity	lsoform 1 and isoform 2 are highly expressed in activated T-cells.	
Sequence similarities	Belongs to the type I cytokine receptor family. Type 4 subfamily. Contains 1 fibronectin type-III domain.	
Domain	The extracellular domain represents the IL4 binding protein (IL4BP). The WSXWS motif appears to be necessary for proper protein folding and thereby efficient intracellular transport and cell-surface receptor binding. The box 1 motif is required for JAK interaction and/or activation. Contains 1 copy of a cytoplasmic motif that is referred to as the immunoreceptor tyrosine-based inhibitor motif (ITIM). This motif is involved in modulation of cellular responses. The phosphorylated ITIM motif can bind the SH2 domain of several SH2-containing phosphatases.	
Post-translational modifications	On IL4 binding, phosphorylated on C-terminal tyrosine residues. Phosphorylation on any one of tyrosine residues, Tyr-575, Tyr-603 or Tyr-631, is required for STAT6-induced gene induction. The soluble form (sIL4R/IL4BP) can also be produced by proteolytic cleavage at the cell surface (shedding) by a metalloproteinase.	
Cellular localization	Secreted and Cell membrane.	



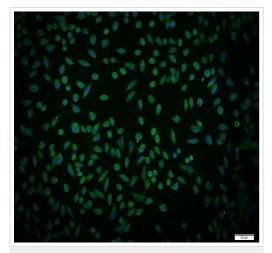
Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human colon carcinoma tissue labeling IL4R with ab203398 at 1/200 dilution followed by conjugation to the secondary antibody and DAB staining.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-IL-4R antibody (ab203398)



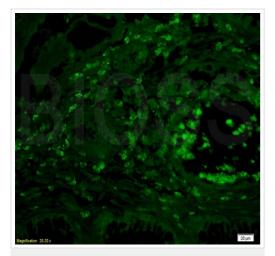
Flow Cytometry - Anti-IL-4R antibody (ab203398)

Flow Cytometry analysis of Raji cells labeling IL-4R with ab203398. Cells were fixed with 2% PFA (10min at room temperature). The cells were then incubated in 1 X PBS containing 0.5% BSA + 10% goat serum to block non-specific protein-protein interactions for 15 min at room temperature. Staining with ab203398 was performed at 1/100 for 30 min at room temperature. The secondary antibody, Goat anti-rabbit IgG-PE, was used at a 1/200 dilution for 40 min at room temperature. Primary antibody staining (green) is compared to compared to unstained cells (dark blue), secondary only (light blue), and isotype control (orange).



Immunocytochemistry/ Immunofluorescence - Anti-IL-4R antibody (ab203398)

Immunocytochemistry/ Immunofluorescence analys of A431 cells labeling IL-4R with ab203398 1/100 for 90 minutes at 37°C. Cells were fixed with 4% Paraformaldehyde, Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum) at 37°C for 20 min. Secondary antibody was Goat Anti-Rabbit IgG antibody with FITC conjugation at 37°C for 90 minutes, DAPI (5ug/ml, blue) was used to stain the cell nuclei.



Formalin-fixed, paraffin-embedded human colon carcinoma tissue stained for IL4R using ab203398 at 1/200 dilution in immunohistochemical analysis, followed by conjugation to the secondary antibody Goat Anti-Rabbit IgG, AF488 conjugated at 1/200 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-IL-4R antibody (ab203398)

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