

IL-8RB (K-19): sc-683

BACKGROUND

IL-8 has been shown to function as a potent neutrophil chemostatic and activating peptide and is an important mediator of inflammatory diseases. Two distinct human IL-8 receptors, designated IL-8RA and IL-8RB respectively, have been characterized. Both are expressed at a high level on neutrophils, and to a lesser extent on monocytes and myeloid cell lines. In addition, the IL-8RA subunit is expressed in T cells such as the Jurkat cell line. Both IL-8Rs are members of the seven transmembrane domain rhodopsin superfamily of receptors and as such, couple G proteins for signal transduction. The two receptors share 77% amino acid identity. IL-8RA exhibits high affinity binding for IL-8 and low affinity MGSA binding, whereas IL-8RB has high affinity binding for both IL-8 and MGSA.

CHROMOSOMAL LOCATION

Genetic locus: IL8RB (human) mapping to 2q35; IL8rb (mouse) mapping to 1 C3.

SOURCE

IL-8RB (K-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of IL-8RB of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-683 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as phycoerythrin conjugate for flow cytometry, sc-683 PE, 100 tests.

APPLICATIONS

IL-8RB (K-19) is recommended for detection of IL-8RB of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 µg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IL-8RB siRNA (h): sc-40028, IL-8RB siRNA (m): sc-40029, IL-8RB shRNA Plasmid (h): sc-40028-SH, IL-8RB shRNA Plasmid (m): sc-40029-SH, IL-8RB shRNA (h) Lentiviral Particles: sc-40028-V and IL-8RB shRNA (m) Lentiviral Particles: sc-40029-V.

Molecular Weight of IL-8RB: 45 kDa.

Positive Controls: mouse liver extract: sc-2256.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

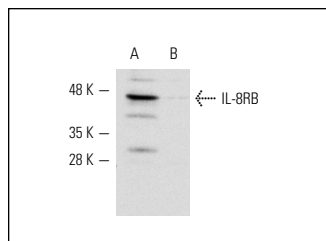
PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

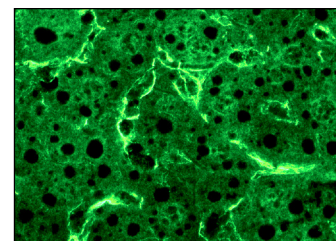
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



IL-8RB (K-19): sc-683. Western blot analysis of IL-8RB expression in whole cell lysates prepared from CHO-K1 cells transfected with IL-8RB (A) and untransfected CHO-K1 cells (B).



IL-8RB (K-19): sc-683. Immunofluorescence staining of normal mouse liver frozen section showing membrane and cytoplasmic staining.

SELECT PRODUCT CITATIONS

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4. Moepps, B., et al. 2006. A homolog of the human chemokine receptor CXCR1 is expressed in the mouse. *Mol. Immunol.* 43: 897-914.
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7. Levashova, Z.B., et al. 2007. ELR⁺-CXC chemokines and their receptors in early metanephric development. *J. Am. Soc. Nephrol.* 18: 2359-2370.
8. Beech, J.S., et al. 2007. The MHP36 line of murine neural stem cells expresses functional CXCR1 chemokine receptors that initiate chemotaxis *in vitro*. *J. Neuroimmunol.* 184: 198-208.
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10. Richards, H., et al. 2010. Novel role of regulatory T cells in limiting early neutrophil responses in skin. *Immunology* 131: 583-592.
11. Wu, Y., et al. 2012. A chemokine receptor CXCR2 macromolecular complex regulates neutrophil functions in inflammatory diseases. *J. Biol. Chem.* 287: 5744-5755.