

IL-8RA (G-20): sc-23811

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, 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.

REFERENCES

1. Holmes, W.E., et al. 1991. Structure and functional expression of a human interleukin-8 receptor. *Science* 253: 1278-1280.
2. Murphy, P.M., et al. 1991. Cloning of complementary DNA encoding a functional human interleukin-8 receptor. *Science* 253: 1280-1283.
3. Koch, A.E., et al. 1992. Interleukin-8 as a macrophage-derived mediator of angiogenesis. *Science* 258: 1789-1801.
4. Lee, J., et al. 1992. Characterization of two high affinity human interleukin-8 receptors. *J. Biol. Chem.* 267: 16283-16287.
5. Hebert, C.A., et al. 1993. Interleukin-8: a review. *Cancer Invest.* 11: 743-750.

CHROMOSOMAL LOCATION

Genetic locus: Cxcr1 (mouse) mapping to 1 C3.

SOURCE

IL-8RA (G-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of IL-8RA of rat origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-23811 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IL-8RA (G-20) is recommended for detection of IL-8RA of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

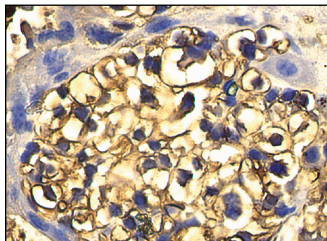
Suitable for use as control antibody for IL-8RA siRNA (m): sc-40027, IL-8RA shRNA Plasmid (m): sc-40027-SH and IL-8RA shRNA (m) Lentiviral Particles: sc-40027-V.

Molecular Weight of IL-8RA: 70 kDa.

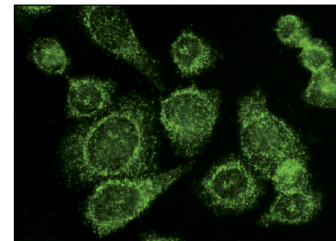
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



IL-8RA (G-20): sc-23811. Immunoperoxidase staining of formalin-fixed, paraffin-embedded mouse placenta tissue showing membrane localization.



IL-8RA (G-20): sc-23811. Immunofluorescence staining of methanol-fixed IL-8RA-transfected CHO cells showing membrane localization.

SELECT PRODUCT CITATIONS

1. Tee, M.K., et al. 2006. All-*trans* retinoic acid inhibits vascular endothelial growth factor expression in a cell model of neutrophil activation. *Endocrinology* 147: 1264-1270.
2. De Paola, M., et al. 2007. Chemokine MIP-2/CXCL2, acting on CXCR2, induces motor neuron death in primary cultures. *Neuroimmunomodulation* 14: 310-316.
3. Kalayarasan, S., et al. 2013. Diallylsulfide attenuates excessive collagen production and apoptosis in a rat model of bleomycin induced pulmonary fibrosis through the involvement of protease activated receptor-2. *Toxicol. Appl. Pharmacol.* 271: 184-195.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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