SANTA CRUZ BIOTECHNOLOGY, INC.

IL-8RB (P-19): sc-32089

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 IL-8 receptor. Science 253: 1278-1280.
2. Murphy, P.M., et al. 1991. Cloning of complementary DNA encoding a functional human IL-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 IL-8 receptors. J. Biol. Chem. 267: 16283-16287.
5. Hebert, C.A., et al. 1993. IL-8: a review. Cancer Invest. 11: 743-750.
6. Kupper, R.W., et al. 1993. G protein activation by IL-8 and related cytokines in human neutrophil plasma membranes. Biochem. J. 282: 429-434.
7. Moser, B., et al. 1993. Expression of transcripts for two IL-8 receptors in human phagocytes, lymphocytes and melanoma cells. Biochem. J. 294: 285-292.
8. Barnett, M.L., et al. 1993. Characterization of IL-8 receptors in human neutrophil membranes: regulation by guanine nucleotides. Biochim. Biophys. Acta 1177: 275-282.
9. Chuntharapai, A., et al. 1994. Monoclonal antibodies detect different distribution patterns of IL-8RA and IL-8RB on human peripheral blood leukocytes. J. Immunol. 153: 5682-5688.

CHROMOSOMAL LOCATION

Genetic locus: IL8RB (human) mapping to 2q35; Il8rb (mouse) mapping to 1 C3.

SOURCE

IL-8RB (P-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of IL-8RB of mouse origin.

STORAGE

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

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-32089 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IL-8RB (P-19) is recommended for detection of IL-8RB of mouse 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IL-8RB siRNA (m): sc-40029.

Molecular Weight of IL-8RB: 45 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.

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.