SANTA CRUZ BIOTECHNOLOGY, INC.

IL-8RA (N-19): sc-989

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.

CHROMOSOMAL LOCATION

Genetic locus: CXCR1 (human) mapping to 2q35.

SOURCE

IL-8RA (N-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of IL-8RA of human 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-989 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

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

Suitable for use as control antibody for IL-8RA siRNA (h): sc-40026, IL-8RA shRNA Plasmid (h): sc-40026-SH and IL-8RA shRNA (h) Lentiviral Particles: sc-40026-V.

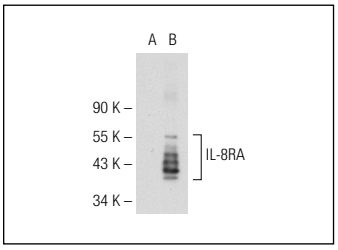
Molecular Weight of IL-8RA: 70 kDa.

Positive Controls: IL-8RA (h3): 293T Lysate: sc-176056.

STORAGE

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

DATA



IL-8RA (N-19): sc-989. Western blot analysis of IL-8RA expression in non-transfected: sc-117752 (**A**) and human IL-8RA transfected: sc-176056 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Manna, S.K. and Ramesh, G.T. 2005. Interleukin-8 induces nuclear transcription factor-κB through a TRAF6-dependent pathway. J. Biol. Chem. 280: 7010-7021.
2. De Paepe, B., et al. 2005. α-chemokine receptors CXCR1-3 and their ligands in idiopathic inflammatory myopathies. Acta Neuropathol. 109: 576-582.
3. 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.
4. Yang, J., et al. 2009. Reciprocal regulation of 17β-Estradiol, interleukin-6 and interleukin-8 during growth and progression of epithelial ovarian cancer. Cytokine 46: 382-391.
5. De Paepe, B., et al. 2012. Upregulation of chemokines and their receptors in duchenne muscular dystrophy: potential for attenuation of myofiber necrosis. Muscle Nerve 45: 914-916.

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.