

IL-8 (807): sc-52870

BACKGROUND

Interleukin-8, or IL-8, the prototypic member of the C-X-C, or α , family of chemokines, is a chemoattractant cytokine involved in the chemotaxis and activation of neutrophils. IL-8 expression has been correlated to a large number of chronic inflammatory diseases, including inflammatory bowel disease (IBD) and atherosclerosis. IL-8 is cleaved from a 99 amino acid precursor to a 72 amino acid, nonglycosylated, biologically active protein. IL-8 monomers and dimers exhibit a dynamic equilibrium both free in solution and in cell surface-bound forms, and thus regulate chemotaxis and receptor signaling. Research has shown that IL-8 dimerization functions as a negative regulator for IL-8 receptor function. Two IL-8 receptors, designated IL-8RA and IL-8RB, have been described and share 77% sequence identity. Both are seven-transmembrane domain proteins (7TMD), similar to the G protein-coupled receptors and, in addition to IL-8, serve as receptors for other members of the α and β chemokine families.

REFERENCES

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2. Laterveer, L., et al. 1996. Rapid mobilization of hematopoietic progenitor cells in rhesus monkeys by a single intravenous injection of interleukin-8. *Blood* 87: 781-788.
3. Knall, C., et al. 1996. Interleukin-8 regulation of the Ras/Raf/mitogen-activated protein kinase pathway in human neutrophils. *J. Biol. Chem.* 271: 2832-2838.
4. Ray, E., et al. 1996. Dansyl cadaverine regulates ligand induced endocytosis of interleukin-8 receptor in human polymorphonuclear neutrophils. *FEBS Lett.* 378: 235-239.
5. Grimm, M.C., et al. 1996. Interleukin 8: cells of origin in inflammatory bowel disease. *Gut* 38: 90-98.
6. Ahuja, S.K., et al. 1996. C-X-C chemokines bind to unique sets of selectivity determinants that can function independently and are broadly distributed on multiple domains of human interleukin-8 receptor B. Determinants of high affinity binding and receptor activation are distinct. *J. Biol. Chem.* 271: 225-232.
7. Wells, T.N., et al. 1996. Selectivity and antagonism of chemokine receptors. *J. Leukoc. Biol.* 59: 53-60.

CHROMOSOMAL LOCATION

Genetic locus: IL8 (human) mapping to 4q13.3.

SOURCE

IL-8 (807) is a mouse monoclonal antibody raised against recombinant IL-8 of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

IL-8 (807) is recommended for detection of both recombinant and native IL-8 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000); non cross-reactive with human Monocyte Chemoattractant Activating Factor (MCAF) or RANTES (Regulated on Activation, Normal T cell Expressed, and Secreted).

Suitable for use as control antibody for IL-8 siRNA (h): sc-39631, IL-8 shRNA Plasmid (h): sc-39631-SH and IL-8 shRNA (h) Lentiviral Particles: sc-39631-V.

Molecular Weight of IL-8: 8 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

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 for detailed protocols and support products.



See **IL-8 (C-11): sc-376750** for IL-8 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.