

IL-8 (H-60): sc-7922

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

1. Rajarathnam, K., et al. 1994. Neutrophil activation by monomeric interleukin-8. *Science* 264: 90-92.
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.

CHROMOSOMAL LOCATION

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

SOURCE

IL-8 (H-60) is a rabbit polyclonal antibody raised against amino acids 40-99 of IL-8 of human origin.

PRODUCT

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

APPLICATIONS

IL-8 (H-60) is recommended for detection of IL-8 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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-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.

RESEARCH USE

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

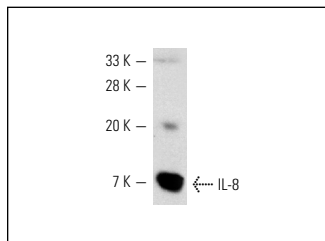
PROTOCOLS

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

STORAGE

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

DATA



IL-8 (H-60): sc-7922. Western blot analysis of human recombinant IL-8.

SELECT PRODUCT CITATIONS

1. Giri, D., et al. 2001. Interleukin-8 is a paracrine inducer of fibroblast growth factor 2, a stromal and epithelial growth factor in benign orostatic hyperplasia. *Am. J. Path.* 159: 139-147.
2. Kakurai, M., et al. 2001. Vasoactive intestinal peptide regulates its receptor expression and functions of human keratinocytes via type I vasoactive intestinal peptide receptors. *J. Invest. Dermatol.* 116: 743-749.
3. Liu, P., et al. 2009. Regulation of inflammatory cytokine expression in pulmonary epithelial cells by pre-B-cell colony-enhancing factor via a nonenzymatic and AP-1-dependent mechanism. *J. Biol. Chem.* 284: 27344-27351.
4. Huang, D., et al. 2010. Interleukin-8 mediates resistance to antiangiogenic agent sunitinib in renal cell carcinoma. *Cancer Res.* 70: 1063-1071.
5. Simone, R.E., et al. 2011. Lycopene inhibits NF- κ B-mediated IL-8 expression and changes redox and PPAR γ signalling in cigarette smoke-stimulated macrophages. *PLoS ONE* 6: e19652.
6. Lai, T.Y., et al. 2011. β -catenin plays a key role in metastasis of human hepatocellular carcinoma. *Oncol. Rep.* 26: 415-422.
7. Pereira, R.C., et al. 2013. Dual effect of platelet lysate on human articular cartilage: a maintenance of chondrogenic potential and a transient proinflammatory activity followed by an inflammation resolution. *Tissue Eng. Part A* 19: 1476-1488.
8. Pernhorst, K., et al. 2013. TLR4, ATF-3 and IL8 inflammation mediator expression correlates with seizure frequency in human epileptic brain tissue. *Seizure* 22: 675-678.



Try **IL-8 (C-11): sc-376750** or **IL-8 (B-2): sc-8427**, our highly recommended monoclonal alternatives to IL-8 (H-60). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **IL-8 (C-11): sc-376750**.