

## IL-8 (C-19): sc-1269

### BACKGROUND

Interleukin-8, or IL-8, the prototypic member of the C-X-C, or  $\alpha$ , 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  $\alpha$  and  $\beta$  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.
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.

### CHROMOSOMAL LOCATION

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

### SOURCE

IL-8 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of IL-8 of human origin.

### PRODUCT

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

Blocking peptide available for competition studies, sc-1269 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

IL-8 (C-19) 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  $\mu$ g per 100-500  $\mu$ 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).

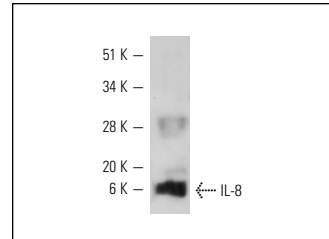
Suitable for use as control antibody for IL-8 siRNA (h): sc-39631, IL-8 shRNA Plasmid (h): sc-39631-SH and IL-8 shRNA (h) Lentiviral Particles: sc-39631-V.

Molecular Weight of IL-8: 8 kDa.

### STORAGE

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

### DATA



Western blot analysis of human recombinant IL-8 immunoprecipitated with IL-8 (A-6): sc-7302 and detected with IL-8 (C-19): sc-1269.

### SELECT PRODUCT CITATIONS

1. Kehlen, A., et al. 2001. Increased expression of interleukin-8 and aminopeptidase N by cell-cell contact: interleukin-8 is resistant to degradation by aminopeptidase N/CD13. *Eur. Cytokine Netw.* 12: 316-324.
2. Peloggia, A., et al. 2006. Endometrial chemokines, uterine natural killer cells and mast cells in long-term users of the levonorgestrel-releasing intrauterine system. *Hum. Reprod.* 21: 1129-1134.
3. Grzibovskis, M., et al. 2011. Specific signaling molecule expressions in the interradicular septum in different age groups. *Stomatologija* 13: 81-86.
4. Grzibovskis, M., et al. 2011. Specific signaling molecule expression in periodontal ligaments in different age groups: pilot study. *Stomatologija* 13: 117-122.
5. Mozeika, E., et al. 2011. Distribution of human B-defensin 2, TNF- $\alpha$ , IL-1  $\alpha$ , IL-6 and IL-8 in psoriatic skin. *Acad. J.* 20: p289.
6. Smane, L., et al. 2012. Local expression of inflammatory cytokines in the facial tissue of children with a cleft lip and palate. *Papers on Anthropology*. E-published.

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **IL-8 (C-11): sc-376750** or **IL-8 (B-2): sc-8427**, our highly recommended monoclonal alternatives to PIL-8 (C-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **IL-8 (C-11): sc-376750**.