SANTA CRUZ BIOTECHNOLOGY, INC.

# IL-8 (B-2): sc-8427

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## 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.

## CHROMOSOMAL LOCATION

Genetic locus: CXCL8 (human) mapping to 4q13.3.

## SOURCE

IL-8 (B-2) is a mouse monoclonal antibody raised against amino acids 40-99 of IL-8 of human origin.

## PRODUCT

Each vial contains 200 µg $IgG_{2b}$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

IL-8 (B-2) is available conjugated to agarose (sc-8427 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-8427 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-8427 PE), fluorescein (sc-8427 FITC), Alexa Fluor® 488 (sc-8427 AF488), Alexa Fluor® 546 (sc-8427 AF546), Alexa Fluor® 594 (sc-8427 AF594) or Alexa Fluor® 647 (sc-8427 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-8427 AF680) or Alexa Fluor® 790 (sc-8427 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

## APPLICATIONS

IL-8 (B-2) 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 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-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.

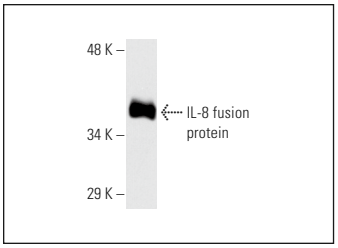
## STORAGE

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

## RESEARCH USE

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

## DATA




L-8 (B-2): sc-8427. Western blot analysis of human recombinant IL-8 fusion protein.

## SELECT PRODUCT CITATIONS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2. Bao, S. 2004. Periostin potently promotes metastatic growth of colon cancer by augmenting cell survival via the Akt/PKB pathway. Cancer Cell 5: 329-339.
3. Riedel, F., et al. 2005 Mar-Apr. Immunohistochemical analysis of radiation-induced non-healing dermal wounds of the head and neck. In Vivo 19: 343-350.
4. Balogh, G.A., et al. 2007. Immune-surveillance and programmed cell death-related genes are significantly overexpressed in the normal breast epithelium of postmenopausal parous women. Int. J. Oncol. 31: 303-312.
5. Lange, M., et al. 2011. Beneficial pulmonary effects of a metalloporphyrinic peroxynitrite decomposition catalyst in burn and smoke inhalation injury. Am. J. Physiol. Lung Cell. Mol. Physiol. 300: L167-L175.
6. Ge, D., et al. 2013. Phosphorylation and nuclear translocation of Integrin β4 induced by a chemical small molecule contribute to apoptosis in vascular endothelial cells. Apoptosis 18: 1120-1131.
7. Zhang, K., et al. 2015. Rhein inhibits lipopolysaccharide-induced intestinal injury during sepsis by blocking the Toll-like receptor 4 nuclear factor-κB pathway. Mol. Med. Rep. 12: 4415-4421.
8. Anzalone, G., et al. 2016. IL-17A induces chromatin remodeling promoting IL-8 release in bronchial epithelial cells: effect of tiotropium. Life Sci. 152: 107-116.
9. Pace, E., et al. 2017. Effects of carbocysteine and beclomethasone on histone acetylation/deacetylation processes in cigarette smoke exposed bronchial epithelial cells. J. Cell. Physiol. 232: 2851-2859.


## PROTOCOLS

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