

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

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 μ g 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 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-8427 HRP), 200 μ g/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 μ g/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 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

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

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 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).

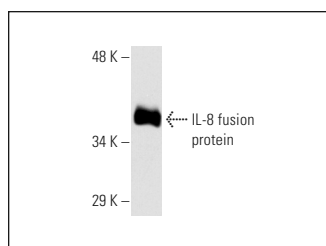
Suitable for use as control antibody for IL-8 siRNA (h): sc-39631, IL-8 shRNA Plasmid (h): sc-39631-SH and IL-8 shRNA (h) Lentiviral Particles: sc-39631-V.

Molecular Weight of IL-8: 8 kDa.

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, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



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

SELECT PRODUCT CITATIONS

1. Tang, S., et al. 2003. Albumin stimulates interleukin-8 expression in proximal tubular epithelial cells *in vitro* and *in vivo*. J. Clin. Invest. 111: 515-527.
2. 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.
3. 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.
4. Ge, D., et al. 2013. Phosphorylation and nuclear translocation of Integrin β 4 induced by a chemical small molecule contribute to apoptosis in vascular endothelial cells. 18: 1120-1131.
5. Zhang, K., et al. 2015. Rhein inhibits lipopolysaccharide-induced intestinal injury during sepsis by blocking the Toll-like receptor 4 nuclear factor- κ B pathway. Mol. Med. Rep. 12: 4415-4421.
6. 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.
7. 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.

RESEARCH USE

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