IL-8 (C-11): sc-376750



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 (C-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 71-99 at the C-terminus of IL-8 of human origin.

PRODUCT

Each vial contains 200 $\mu g \; lg G_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

IL-8 (C-11) is available conjugated to agarose (sc-376750 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376750 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376750 PE), fluorescein (sc-376750 FITC), Alexa Fluor* 488 (sc-376750 AF488), Alexa Fluor* 546 (sc-376750 AF546), Alexa Fluor* 594 (sc-376750 AF594) or Alexa Fluor* 647 (sc-376750 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor* 680 (sc-376750 AF680) or Alexa Fluor* 790 (sc-376750 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-376750 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

IL-8 (C-11) is recommended for detection of IL-8 of human origin by Western Blotting (starting dilution 1:100, 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).

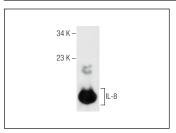
Suitable for use as control antibody for IL-8 siRNA (h): sc-39631, IL-8 shRNA Plasmid (h): sc-39631-SH and IL-8 shRNA (h) Lentiviral Particles: sc-39631-V.

Molecular Weight of IL-8: 8 kDa.

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 (C-11): sc-376750. Western blot analysis of human

SELECT PRODUCT CITATIONS

- Zhou, W., et al. 2014. MiR-126-5p regulates osteolysis formation and stromal cell proliferation in giant cell tumor through inhibition of PTHrP. Bone 66: 267-276.
- Wu, S.M., et al. 2017. Hepatoma cell functions modulated by NEK2 are associated with liver cancer progression. Int. J. Cancer 140: 1581-1596.
- Nassef, M.Z., et al. 2019. Real microgravity influences the cytoskeleton and focal adhesions in human breast cancer cells. Int. J. Mol. Sci. 20: 3156.
- 4. Kutlu, Z., et al. 2020. Effects of umbelliferone isolated from the *Ferulago* pauciradiata Boiss. & Heldr. Plant on cecal ligation and puncture-induced sepsis model in rats. Biomed. Pharmacother. 127: 110206.
- 5. Lin, Z.P., et al. 2020. TLR4 mediates inflammation and hepatic fibrosis induced by chronic intermittent hypoxia in rats. Mol. Med. Rep. 22: 651-660.
- Zhou, D.Y., et al. 2020. In silico prediction and validation of potential therapeutic genes in pancreatic β-cells associated with type 2 diabetes. Exp. Ther. Med. 20: 60.
- 7. Pinto, D.O., et al. 2021. Extracellular vesicles from HTLV-1 infected cells modulate target cells and viral spread. Retrovirology 18: 6.
- 8. Han, B., et al. 2021. Inhibition of autophagy promotes human RSV NS1-induced inflammation and apoptosis *in vitro*. Exp. Ther. Med. 22: 1054.
- Mayca Pozo, F., et al. 2021. MY010 drives genomic instability and inflammation in cancer. Sci. Adv. 7: eabg6908.
- 10. Khatiwada, S., et al. 2021. The novel ORFV protein ORFV113 activates LPA-p38 signaling. PLoS Pathog. 17: e1009971.
- 11. Yi, M., et al. 2022. CXCL8 facilitates the survival and paclitaxel-resistance of triple-negative breast cancers. Clin. Breast Cancer 22: e191-e198.

RESEARCH USE

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