SANTA CRUZ BIOTECHNOLOGY, INC.

IL-8RA (B-1): sc-7303

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

IL-8 has been shown to function as a potent neutrophil chemostatic and activating peptide and is an important mediator of inflammatory diseases. Two distinct human IL-8 receptors, designated IL-8RA and IL-8RB, have been characterized. Both are expressed at a high level on neutrophils, and to a lesser extent on monocytes and myeloid cell lines. In addition, the IL-8RA subunit is expressed in T cells such as the Jurkat cell line. Both IL-8Rs are members of the seven-transmembrane domain rhodopsin superfamily of receptors and as such, couple G proteins for signal transduction. The two receptors share 77% amino acid identity. IL-8RA exhibits high-affinity binding for IL-8 and low-affinity MGSA binding, whereas IL-8RB has high-affinity binding for both IL-8 and MGSA.

CHROMOSOMAL LOCATION

Genetic locus: CXCR1 (human) mapping to 2q35.

SOURCE

IL-8RA (B-1) is a mouse monoclonal antibody epitope mapping at the N-terminus of IL-8RA of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

IL-8RA (B-1) is available conjugated to agarose (sc-7303 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-7303 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-7303 PE), fluorescein (sc-7303 FITC), Alexa Fluor® 488 (sc-7303 AF488), Alexa Fluor® 546 (sc-7303 AF546), Alexa Fluor® 594 (sc-7303 AF594) or Alexa Fluor® 647 (sc-7303 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-7303 AF680) or Alexa Fluor® 790 (sc-7303 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-8RA (B-1) is recommended for detection of IL-8RA of human and hamster 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), immunohistochemistry (including paraffin-embedded sections) (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-8RA siRNA (h): sc-40026, IL-8RA shRNA Plasmid (h): sc-40026-SH and IL-8RA shRNA (h) Lentiviral Particles: sc-40026-V.

Molecular Weight of IL-8RA: 70 kDa.

Positive Controls: IL-8RA (h3): 293T Lysate: sc-176056.

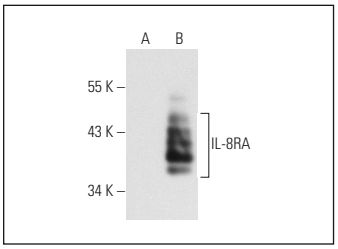
RESEARCH USE

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

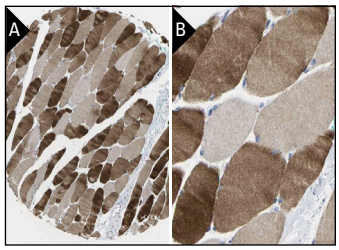
STORAGE

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

DATA



IL-8RA (B-1): sc-7303. Western blot analysis of IL-8RA expression in non-transfected: sc-117752 (**A**) and human IL-8RA transfected: sc-176056 (**B**) 293T whole cell lysates.



IL-8RA (B-1): sc-7303. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skeletal muscle tissue showing cytoplasmic staining of myocytes at low (**A**) and high (**B**) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

1. Bates, R.C., et al. 2004. The epithelial-mesenchymal transition of colon carcinoma involves expression of IL-8 and CXCR-1-mediated chemotaxis. Exp. Cell Res. 299: 315-324.
2. Gillman, A.N., et al. 2017. Epidermal growth factor receptor signaling enhances the proinflammatory effects of *Staphylococcus aureus* γ-toxin on the mucosa. Toxins 9: 202.
3. Gatla, H.R., et al. 2017. Histone deacetylase (HDAC) inhibition induces IκB kinase (IKK)-dependent interleukin-8/CXCL8 expression in ovarian cancer cells. J. Biol. Chem. 292: 5043-5054.
4. Uddin, M.M., et al. 2018. Proteasome inhibition induces IKK-dependent interleukin-8 expression in triple negative breast cancer cells: opportunity for combination therapy. PLoS ONE 13: e0201858.
5. Takemori, T., et al. 2018. Transcutaneous carbon dioxide application suppresses bone destruction caused by breast cancer metastasis. Oncol. Rep. 40: 2079-2087.
6. Blandinières, A., et al. 2020. Interleukin-8 receptors CXCR1 and CXCR2 are not expressed by endothelial colony-forming cells. Stem Cell Rev. Rep. E-published.
7. Shibaguchi, H., et al. 2021. Novel method to analyze cell kinetics for the rapid diagnosis and determination of the causative agent in allergy. PLoS ONE 16: e0246125.

PROTOCOLS

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