

IL-8RB (5E8): sc-32780

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.

REFERENCES

- Holmes, W.E., et al. 1991. Structure and functional expression of a human interleukin-8 receptor. *Science* 253: 1278-1280.
- Murphy, P.M. and Tiffany, H.L. 1991. Cloning of complementary DNA encoding a functional human interleukin-8 receptor. *Science* 253: 1280-1283.
- Koch, A.E., et al. 1992. Interleukin-8 as a macrophage-derived mediator of angiogenesis. *Science* 258: 1789-1801.
- Lee, J., et al. 1992. Characterization of two high affinity human interleukin-8 receptors. *J. Biol. Chem.* 267: 16283-16287.
- Hebert, C.A. and Baker, J.B. 1993. Interleukin-8: a review. *Cancer Invest.* 11: 743-750.

CHROMOSOMAL LOCATION

Genetic locus: CXCR2 (human) mapping to 2q35.

SOURCE

IL-8RB (5E8) is a mouse monoclonal antibody raised against mouse B cell lymphoma L1.2 transfectants expressing IL-8RB of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

IL-8RB (5E8) is available conjugated to either phycoerythrin (sc-32780 PE) or fluorescein (sc-32780 FITC), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

APPLICATIONS

IL-8RB (5E8) is recommended for detection of IL-8RB 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)] and flow cytometry (1 µg per 1 x 10⁶ cells).

Suitable for use as control antibody for IL-8RB siRNA (h): sc-40028, IL-8RB shRNA Plasmid (h): sc-40028-SH and IL-8RB shRNA (h) Lentiviral Particles: sc-40028-V.

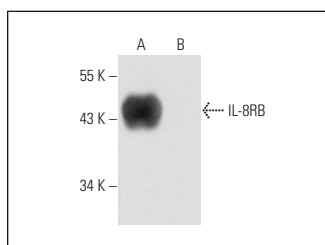
Molecular Weight of IL-8RB: 45 kDa.

Positive Controls: IL-8RB (h3): 293T Lysate: sc-176067.

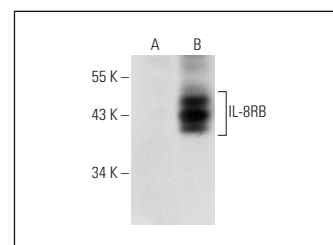
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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).

DATA



IL-8RB (5E8): sc-32780. Western blot analysis of IL-8RB expression in IL-8RB transfected CHO-K1 cells (A) and non-transfected CHO-K1 (B) cells.



IL-8RB (5E8): sc-32780. Western blot analysis of IL-8RB expression in non-transfected: sc-117752 (A) and human IL-8RB transfected: sc-176067 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Keeve, P.L., et al. 2013. Characterization and analysis of migration patterns of dentospheres derived from periodontal tissue and the palate. *J. Periodontol Res.* 48: 276-285.
- Shin, J.H., et al. 2014. Ischemic brain extract increases SDF-1 expression in astrocytes through the CXCR2/miR-223/miR-27b pathway. *Biochim. Biophys. Acta* 1839: 826-836.
- Hou, S.M., et al. 2020. CXCL1 contributes to IL-6 expression in osteoarthritis and rheumatoid arthritis synovial fibroblasts by CXCR2, c-Raf, MAPK, and AP-1 pathway. *Arthritis Res. Ther.* 22: 251.
- 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.

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.



See **IL-8RB (E-2): sc-7304** for IL-8RB antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.