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



The Power to Overtin

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., Lee, J., Kuang, W.J., Rice, G.C. and Wood, W.I. 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., Polverini, J., Kunkel, S.L., Harlow, L.A., Dipietro, L.A., Elner, V.M., Elner, S.G. and Strieter, R.M. 1992. Interleukin-8 as a macrophage-derived mediator of angiogenesis. Science 258: 1789-1801.
- 4. Lee, J., Horuk, R., Rice, G.C., Bennett, G.L., Camerato, T. and Wood, W.I. 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.
- Kupper, R.W., Dewald, B., Jakobs, K.H., Baggiolini, M. and Gierschik, P. 1993. G protein activation by IL-8 and related cytokines in human neutrophil plasma membranes. Biochem. J. 282: 429-434.
- Moser, B., Barella, L., Mattei, S., Schumacher, C., Boulay, F., Colombo, M.P. and Baggiolini, M. 1993. Expression of transcripts for two IL-8 receptors in human phagocytes, lymphocytes and melanoma cells. Biochem. J. 294: 285-292.
- 8. Barnett, M.L., Lamb, K.A., Costello, K.M. and Pike, M.C. 1993. Characterization of interleukin-8 receptors in human neutrophil membranes: regulation by guanine nucleotides. Biochim. Biophys. Acta 1177: 275-282.
- 9. Chuntharapai, A., Lee, J., Hebert, C.A. and Kim, K.J. 1994. Monoclonal antibodies detect different distribution patterns of IL-8 receptor A and IL-8 receptor B on human peripheral blood leukocytes. J. Immunol. 153: 5682-5688.

CHROMOSOMAL LOCATION

Genetic locus: IL8RB (human) mapping to 2q35.

PRODUCT

IL-8RB (h3): 293T Lysate represents a lysate of human IL-8RB transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

IL-8RB (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive IL-8RB antibodies. Recommended use: 10-20 µl per lane.

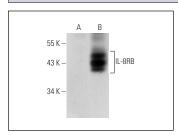
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

IL-8RB (5E8): sc-32780 is recommended as a positive control antibody for Western Blot analysis of enhanced human IL-8RB expression in IL-8RB transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

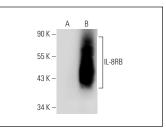
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA







IL-8RB (E-2): sc-7304. Western blot analysis of IL-8RB expression in non-transfected: sc-117752 (**A**) and human IL-8RB transfected: sc-176067 (**B**) 293T whole call breater.

STORAGE

Store at -20 $^{\circ}$ C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com