

IL-8RA/B (H-100): sc-30008

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 respectively, 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., et al. 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.
- Hébert, C.A., et al. 1993. Interleukin-8: a review. *Cancer Invest.* 11: 743-750.
- Kupper, R.W., et al. 1993. G protein activation by interleukin-8 and related cytokines in human neutrophil plasma membranes. *Biochem. J.* 282: 429-434.
- Moser, B., et al. 1993. Expression of transcripts for two interleukin-8 receptors in human phagocytes, lymphocytes and melanoma cells. *Biochem. J.* 294: 285-292.
- Barnett, M.L., et al. 1993. Characterization of interleukin-8 receptors in human neutrophil membranes: regulation by guanine nucleotides. *Biochim. Biophys. Acta* 1177: 275-282.

CHROMOSOMAL LOCATION

Genetic locus: CXCR1/CXCR2 (human) mapping to 2q35; Cxcr1/Cxcr2 (mouse) mapping to 1 C3.

SOURCE

IL-8RA/B (H-100) is a rabbit polyclonal antibody raised against amino acids 141-240 mapping within an internal region of IL-8RA of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

IL-8RA/B (H-100) is recommended for detection of IL-8RA and B of mouse, rat and 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)], 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).

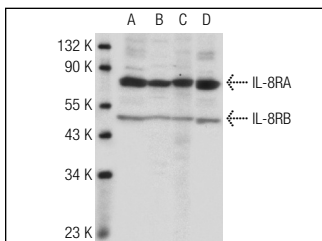
Molecular Weight of IL-8RA/B: 70 kDa.

Positive Controls: J774.A1 cell lysate: sc-3802, RAW 264.7 whole cell lysate: sc-2211 or CTLL-2 cell lysate: sc-2242.

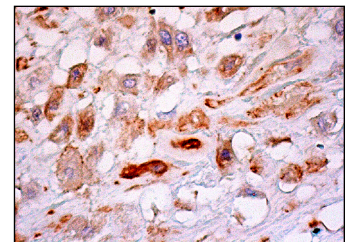
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



IL-8RA/B (H-100): sc-30008. Western blot analysis of IL-8RA/B expression in RAW 264.7 (A), CTLL-2 (B), mouse PBL (C) and J774.A1 (D) whole cell lysates.



IL-8RA/B (H-100): sc-30008. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of decidual cells.

SELECT PRODUCT CITATIONS

- Koyama, Y., et al. 2008. Effect of compressive force on the expression of inflammatory cytokines and their receptors in osteoblastic Saos-2 cells. *Arch. Oral Biol.* 53: 488-496.
- Zhang, H., et al. 2010. Adipose tissue-derived stem cells secrete CXCL5 cytokine with chemoattractant and angiogenic properties. *Biochem. Biophys. Res. Commun.* 402: 560-564.

RESEARCH USE

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