



IL-20R β (M-198): sc-99084

BACKGROUND

The class II cytokine receptor family includes one dozen members. Eleven of which combine as various heterodimers to transduce signals across the cellular membrane for 27 cytokines divided into four structurally related groups: 6 cytokines of the IL-10 family, 17 type I IFNs, 1 type II IFN and 3 IFN- λ . The IL-20R α /IL-20R β dimer functions as a receptor for IL-19, IL-20, IL-24 and IL-26 and is highly expressed in skin, brain and testis. Both IL-20 and the IL-20 receptors have higher expression in psoriatic lesional (LS) skin than in non-lesional (NL) skin, which suggests these proteins may represent potential therapeutic targets. IL-20 can also induce Stat activation through the IL-20 receptors.

REFERENCES

- Dumoutier, L., Lejeune, D., Colau, D. and Renauld, J.C. 2001. Cloning and characterization of IL-22 binding protein, a natural antagonist of IL-10-related T cell-derived inducible factor/IL-22. *J. Immunol.* 166: 7090-7095.
- Dumoutier, L., Leemans, C., Lejeune, D., Kotenko, S.V. and Renauld, J.C. 2001. Cutting edge: Stat activation by IL-19, IL-20 and MDA-7 through IL-20 receptor complexes of two types. *J. Immunol.* 167: 3545-3549.
- Chada, S., Mhashilkar, A.M., Ramesh, R., Mumm, J.B., Sutton, R.B., Bocangel, D., Zheng, M., Grimm, E.A. and Ekmekcioglu, S. 2004. Bystander activity of Ad-MDA-7: human MDA-7 protein kills melanoma cells via an IL-20 receptor-dependent but Stat3-independent mechanism. *Mol. Ther.* 10: 1085-1095.
- Kotenko, S.V. and Langer, J.A. 2004. Full house: 12 receptors for 27 cytokines. *Int. Immunopharmacol.* 4: 593-608.
- Langer, J.A., Cutrone, E.C. and Kotenko, S. 2004. The Class II cytokine receptor (CRF2) family: overview and patterns of receptor-ligand interactions. *Cytokine Growth Factor Rev.* 15: 33-48.
- Wang, F., Lee, E., Lowes, M.A., Haider, A.S., Fuentes-Duculan, J., Abello, M.V., Chamian, F., Cardinale, I. and Krueger, J.G. 2006. Prominent production of IL-20 by CD68⁺/CD11c⁺ myeloid-derived cells in psoriasis: Gene regulation and cellular effects. *J. Invest. Dermatol.* 126: 1590-1599.

CHROMOSOMAL LOCATION

Genetic locus: IL20RB (human) mapping to 3q22.3; Il20rb (mouse) mapping to 9 E3.3.

SOURCE

IL-20R β (M-198) is a rabbit polyclonal antibody raised against amino acids 41-238 mapping within an internal region of IL-20R β of mouse origin.

PRODUCT

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

STORAGE

Store at 4 $^{\circ}$ C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

IL-20R β (M-198) is recommended for detection of IL-20R β of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, 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-20R β siRNA (m): sc-146216, IL-20R β shRNA Plasmid (m): sc-146216-SH and IL-20R β shRNA (m) Lentiviral Particles: sc-146216-V.

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 MarkerTM compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz MarkerTM 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 UltraCruzTM Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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