

IL-20R α (N-15): sc-34099

BACKGROUND

The class II cytokine receptor family includes 12 members, 11 of which combine as various heterodimers to transduce signals across the cellular membrane for 27 cytokines. These cytokines are divided into four structurally related groups: six cytokines of the IL-10 family, 17 type I IFNs, one type II IFN and three IFN- λ . IL-20 is a member of the IL-10 family of cytokines that has been shown to be upregulated in psoriatic skin. The receptor for IL-20 (IL-20R) exists as a dimer consisting of IL-20R α and IL-20R β . IL-20R also functions as a receptor for IL-19, IL-24 and IL-26. It is highly expressed in skin, brain and testis. IL-20, IL-20R α and IL-20R β all have higher expression levels in psoriatic lesional (LS) skin than in nonlesional (NL) skin, suggesting a role for these proteins as potential therapeutic targets. IL-20 can induce signal transducer and activator of transcription (Stat) activation through IL-20R.

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., Mhashikar, 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-mda7: 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: IL20RA (human) mapping to 6q23.3.

SOURCE

IL-20R α (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of IL-20R α of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-34099 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IL-20R α (N-15) is recommended for detection of IL-20R α of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 α siRNA (h): sc-45237, IL-20R α shRNA Plasmid (h): sc-45237-SH and IL-20R α shRNA (h) Lentiviral Particles: sc-45237-V.

Molecular Weight of IL-20R α : 90-110 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

PROTOCOLS

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



Try **IL-20R α (EE09): sc-80065**, our highly recommended monoclonal alternative to IL-20R α (N-15).