SANTA CRUZ BIOTECHNOLOGY, INC.

IL-20Ra (EE09): sc-80065



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

- 1. Dumoutier, L., et al. 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., et al. 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.

CHROMOSOMAL LOCATION

Genetic locus: IL20RA (human) mapping to 6q23.3; II20ra (mouse) mapping to 10 A3.

SOURCE

 $\text{IL-20R}\alpha$ (EE09) is a mouse monoclonal antibody raised against the extracellular domain of $\text{IL-20R}\alpha$ of human origin.

PRODUCT

Each vial contains 100 $\mu g~lgG_1$ in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer.

APPLICATIONS

IL-20R α (EE09) is recommended for detection of IL-20R α 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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for IL-20R α siRNA (h): sc-45237, IL-20R α siRNA (m): sc-45238, IL-20R α shRNA Plasmid (h): sc-45237-SH, IL-20R α shRNA Plasmid (m): sc-45238-SH, IL-20R α shRNA (h) Lentiviral Particles: sc-45237-V and IL-20R α shRNA (m) Lentiviral Particles: sc-45238-V.

Molecular Weight of IL-20Ra: 90-110 kDa.

Positive Controls: J774.A1 cell lysate: sc-3802 or IL-20R α (h): 293T Lysate: sc-372957.

STORAGE

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

DATA





 $L-20R\alpha$ (EE09): sc-80065. Western blot analysis of $L-20R\alpha$ expression in non-transfected: sc-117752 (A) and human $L-20R\alpha$ transfected: sc-372957 (B) 293T whole cell lysates.

IL-20R α (EE09): sc-80065. Western blot analysis of IL-20R α expression in J774.A1 whole cell lysate.

SELECT PRODUCT CITATIONS

- 1. Patani, N., et al. 2010. Tumour suppressor function of MDA-7/IL-24 in human breast cancer. Cancer Cell Int. 10: 29.
- Ablin, R.J., et al. 2011. Prostate transglutaminase (TGase-4) antagonizes the anti-tumour action of MDA-7/IL-24 in prostate cancer. J. Transl. Med. 9: 49.
- Bosanquet, D.C., et al. 2012. Expression of IL-24 and IL-24 receptors in human wound tissues and the biological implications of IL-24 on keratinocytes. Wound Repair Regen. 20: 896-903.
- Estep, J.M., et al. 2015. Adipocytokine expression associated with miRNA regulation and diagnosis of NASH in obese patients with NAFLD. Liver Int. 35: 1367-1372.
- Gao, W., et al. 2021. IL20RA signaling enhances stemness and promotes the formation of an immunosuppressive microenvironment in breast cancer. Theranostics 11: 2564-2580.
- Yu, D., et al. 2021. Super-enhancer induced IL-20RA promotes proliferation/metastasis and immune evasion in colorectal cancer. Front. Oncol. 11: 724655.

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.