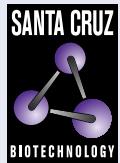


IL-18R (DB08): sc-80051



BACKGROUND

Interleukin-18 (IL-18) has been identified as a molecule that induces IFN- γ production and enhances NK cell cytotoxicity. IL-18 receptor (IL-18R) is a type I membrane protein present in lung, leukocytes, spleen, liver, thymus, prostate, small intestine, colon, placenta and heart, and absent from brain, skeletal muscle, pancreas and kidney. IL-18R is present in Hodgkin's disease cell lines, and does not bind IL-1 α or IL-1 β . The association of IL-18 to IL-18R leads to activation of NF κ B. At present two subunits of IL-18R have been characterized: IL-18R α and IL-18R β . IL-18R α has been described as the ligand-binding chain and IL-18R β as the signal-transduction chain.

REFERENCES

- Torigoe, K., Ushio, S., Okura, T., Kobayashi, S., Taniai, M., Kunikata, T., Murakami, T., Sanou, O., Kojima, H., Fujii, M., Ohta, T., Ikeda, M., Ikegami, H. and Kurimoto, M. 1997. Purification and characterization of the human interleukin-18 receptor. *J. Biol. Chem.* 272: 25737-25742.
- Strand, M.L., Wahlgren, A., Svechnikov, K., Zetterstrom, C., Setchell, B.P. and Soder, O. 2005. Interleukin-18 is expressed in rat testis and may promote germ cell growth. *Mol. Cell. Endocrinol.* 240: 64-73.
- Vermot-Drozches, C., Subiger, O., Guenot, F., Sergent, E., Bonnin, B. and Wijdenes, J. 2005. Monoclonal antibodies specific for the IL-18 receptor. *Cell. Immunol.* 236: 101-104.
- Zhou, Y., Yamaguchi, E., Fukui, Y., Konno, S., Maeda, Y., Kimata, K. and Nishimura, M. 2005. Enhanced expression of interleukin-18 receptor α chain by CD4+ T cells in sarcoidosis. *Chest* 128: 2497-2503.
- Krasna, E., Kolesar, L., Slavcev, A., Valhova, S., Kronosova, B., Jaresova, M. and Striz, I. 2005. IL-18 receptor expression on epithelial cells is upregulated by TNF α . *Inflammation* 29: 33-37.
- Asakawa, M., Kono, H., Amemiya, H., Matsuda, M., Suzuki, T., Maki, A. and Fujii, H. 2006. Role of interleukin-18 and its receptor in hepatocellular carcinoma associated with hepatitis C virus infection. *Int. J. Cancer* 118: 564-570.

CHROMOSOMAL LOCATION

Genetic locus: Il18r1 (mouse) mapping to 1 B.

SOURCE

IL-18R (DB08) is a rat monoclonal antibody raised against IL-18R of mouse origin.

PRODUCT

Each vial contains 100 μ g IgG $_2a$ 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-18R (DB08) is recommended for detection of IL-18R of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Suitable for use as control antibody for IL-18R siRNA (m): sc-45286, IL-18R shRNA Plasmid (m): sc-45286-SH and IL-18R shRNA (m) Lentiviral Particles: sc-45286-V.

Molecular Weight of IL-18R heterogeneous molecules: 60-110 kDa.

Positive Controls: IB4 whole cell lysate: sc-364780.

SELECT PRODUCT CITATIONS

- Scuderi, S.A., Casili, G., Lanza, M., Filippone, A., Paterniti, I., Esposito, E. and Campolo, M. 2020. Modulation of NLRP3 inflammasome attenuated inflammatory response associated to diarrhea-predominant irritable bowel syndrome. *Biomedicines* 8: 519.
- Scuderi, S.A., Casili, G., Basilotta, R., Lanza, M., Filippone, A., Raciti, G., Puliafito, I., Colarossi, L., Esposito, E. and Paterniti, I. 2021. NLRP3 inflammasome inhibitor BAY-117082 reduces oral squamous cell carcinoma progression. *Int. J. Mol. Sci.* 22: 11108.
- Casili, G., Scuderi, S.A., Lanza, M., Filippone, A., Mannino, D., Giuffrida, R., Colarossi, C., Mare, M., Capra, A.P., De Gaetano, F., Portelli, M., Militi, A., Cuzzocrea, S., Paterniti, I. and Esposito, E. 2023. Therapeutic potential of BAY-117082, a selective NLRP3 inflammasome inhibitor, on metastatic evolution in human oral squamous cell carcinoma (OSCC). *Cancers* 15: 2796.
- Sprouse, J., Sampath, C. and Gangula, P. 2023. 17 β -estradiol suppresses Gastric inflammatory and apoptotic stress responses and restores nNOS-mediated gastric emptying in streptozotocin (STZ)-induced diabetic female mice. *Antioxidants* 12: 758.

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.