

IL-26 (LL07): sc-80523

BACKGROUND

The interleukins (ILs) are a broad family of well characterized cytokines, primarily of hematopoietic cell origin. They are secreted by immune cells (mainly macrophages, B cells or T cells) that regulate a wide range of immune system functions. The specific functions of different interleukins vary from the regulation of inflammatory and immune responses to the regulation of other interleukins. IL-26, also known as AK155, is a member of the IL-10 family of cytokines that is generated by memory cells and expressed on T cells. Similar to IL-10, IL-26 can form stable homodimers. IL-26 signals through IL-26R, the heterodimeric receptor composed of IL-20R1 and IL-10R2. It activates the JAK/Stat pathway and predominantly stimulates Stat3 but it can also signal through Stat1. IL-26 also plays a role in the transformed phenotype of T cells after infection by herpes virus.

REFERENCES

1. Wolk, K., Kunz, S., Asadullah, K. and Sabat, R. 2002. Cutting edge: immune cells as sources and targets of the IL-10 family members? *J. Immunol.* 168: 5397-5402.
2. Conti, P., Kempuraj, D., Frydas, S., Kandere, K., Boucher, W., Letourneau, R., Madhappan, B., Sagimoto, K., Christodoulou, S. and Theoharides, T.C. 2003. IL-10 subfamily members: IL-19, IL-20, IL-22, IL-24 and IL-26. *Immunol. Lett.* 88: 171-174.
3. Hör, S., Pirzer, H., Dumoutier, L., Bauer, F., Wittmann, S., Sticht, H., Renauld, J.C., de Waal Malefyt, R. and Fickenscher, H. 2004. The T cell lymphokine Interleukin-26 targets epithelial cells through the Interleukin-20 receptor 1 and Interleukin-10 receptor 2 chains. *J. Biol. Chem.* 279: 33343-33351.
4. Fickenscher, H. and Pirzer, H. 2004. Interleukin-26. *Int. Immunopharmacol.* 4: 609-613.
5. Sheikh, F., Baurin, V.V., Lewis-Antes, A., Shah, N.K., Smirnov, S.V., Anantha, S., Dickensheets, H., Dumoutier, L., Renauld, J.C., Zdanov, A., Donnelly, R.P. and Kotenko, S.V. 2004. Cutting edge: IL-26 signals through a novel receptor complex composed of IL-20 receptor 1 and IL-10 receptor 2. *J. Immunol.* 172: 2006-2010.
6. Liao, S.C., Cheng, Y.C., Wang, Y.C., Wang, C.W., Yang, S.M., Yu, C.K., Shieh, C.C., Cheng, K.C., Lee, M.F., Chiang, S.R., Shieh, J.M. and Chang, M.S. 2004. IL-19 induced Th2 cytokines and was upregulated in asthma patients. *J. Immunol.* 173: 6712-6718.
7. Donnelly, R.P., Sheikh, F., Kotenko, S.V. and Dickensheets, H. 2004. The expanded family of class II cytokines that share the IL-10 receptor-2 (IL-10R2) chain. *J. Leukoc. Biol.* 76: 314-321.
8. Zdanov, A. 2006. Structural studies of the Interleukin-19 subfamily of cytokines. *Vitam. Horm.* 74: 61-76.
9. Sa, S.M., Valdez, P.A., Wu, J., Jung, K., Zhong, F., Hall, L., Kasman, I., Winer, J., Modrusan, Z., Danilenko, D.M. and Ouyang, W. 2007. The effects of IL-20 subfamily cytokines on reconstituted human epidermis suggest potential roles in cutaneous innate defense and pathogenic adaptive immunity in psoriasis. *J. Immunol.* 178: 2229-2240.

CHROMOSOMAL LOCATION

Genetic locus: IL26 (human) mapping to 12q15.

SOURCE

IL-26 (LL07) is a mouse monoclonal antibody raised against full-length recombinant IL-26 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} in 1.0 ml PBS with < 0.1% sodium azide and protein stabilizer.

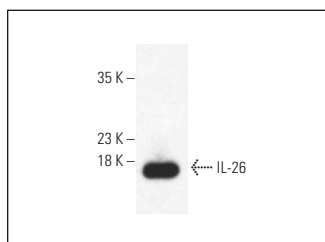
APPLICATIONS

IL-26 (LL07) is recommended for detection of IL-26 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with IL-10.

Suitable for use as control antibody for IL-26 siRNA (h): sc-72398, IL-26 shRNA Plasmid (h): sc-72398-SH and IL-26 shRNA (h) Lentiviral Particles: sc-72398-V.

Molecular Weight of IL-26 monomer: 19 kDa.

DATA



IL-26 (LL07): sc-80523. Western blot analysis of human recombinant IL-26 monomer. Detection reagent used: m-IgG_{2b} BP-HRP: sc-542741.

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 for detailed protocols and support products.