

Datasheet for ABIN1169172

anti-IL-33 antibody[Go to Product page](#)**4** Images**4** Publications

Overview

Quantity:	100 µg
Target:	IL-33 (IL33)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This IL-33 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunoprecipitation (IP), Functional Studies (Func)

Product Details

Immunogen:	Recombinant human IL-33.
Clone:	IL33305B
Isotype:	IgG2a
Specificity:	Recognizes human IL-33.
Cross-Reactivity:	Human
No Cross-Reactivity:	Mouse (Murine)
Cross-Reactivity (Details):	Does not cross-react with mouse IL-33.
Sterility:	0.2 µm filtered

Target Details

Target:	IL-33 (IL33)
Alternative Name:	IL-33 (IL33 Products)
Background:	Interleukin-33 (IL-33, HF-NEV, IL-1F11), a member of the IL-1 family of cytokines, is expressed by many cell types following pro-inflammatory stimulation and is thought to be released on cell lysis. The 30 kDa human IL33 is converted by CASP1 to a 18 kDa protein. IL33 binds to and signals through ST2 (IL1R1) and its stimulation recruits MYD88, IRAK, IRAK4, and TRAF6, followed by phosphorylation of ERK1 (MAPK3)/ERK2 (MAPK1), p38(MAPK14), and JNK. The ability of IL-33 to target numerous immune cell types, like Th2-like cells, mast cells, and B1 cells, and to induce cytokine and chemokine production underlines its potential in influencing the outcome of a wide range of diseases, such as arthritis, asthma, atopic allergy & anaphylaxis, cardiovascular disease/atherosclerosis, nervous system diseases, and sepsis.
UniProt:	O95760
Pathways:	Production of Molecular Mediator of Immune Response

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	Lot specific
Buffer:	0.2µm-filtered solution in PBS, pH 7.4. Contains no preservatives.
Preservative:	Without preservative
Storage:	4 °C,-20 °C
Storage Comment:	Short Term Storage: +4°C Long Term Storage: -20°C Stable for at least 1 year after receipt when stored at -20°C.
Expiry Date:	12 months

Publications

Product cited in:	Pace, Di Sano, Sciarrino, Scafidi, Ferraro, Chiappara, Siena, Gangemi, Vitulo, Giarratano,
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Gjomarkaj: "Cigarette smoke alters IL-33 expression and release in airway epithelial cells." in:

Biochimica et biophysica acta, Vol. 1842, Issue 9, pp. 1630-7, (2014) ([PubMed](#)).

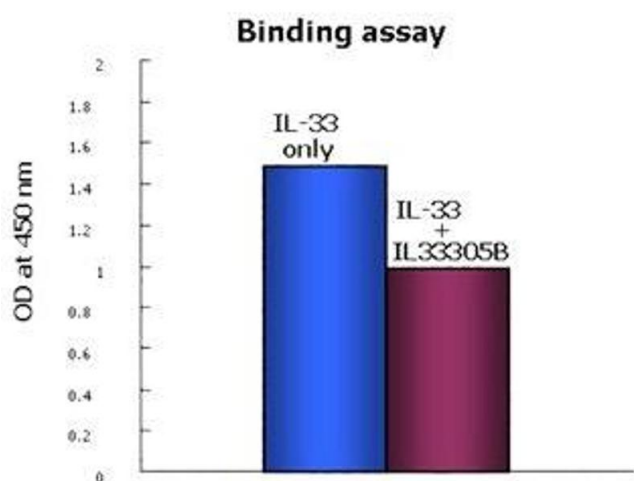
Palmer, Talabot-Ayer, Lamacchia, Toy, Seemayer, Viatte, Finckh, Smith, Gabay: "Inhibition of interleukin-33 signaling attenuates the severity of experimental arthritis." in: **Arthritis and**

rheumatism, Vol. 60, Issue 3, pp. 738-49, (2009) ([PubMed](#)).

Chapuis, Hot, Hansmannel, Kerdraon, Ferreira, Hubans, Maurage, Huot, Bensemain, Laumet, Ayral, Fievet, Hauw, DeKosky, Lemoine, Iwatsubo, Wavrant-Devrière, Dartigues, Tzourio, Buée, Pasquier, Berr et al.: "Transcriptomic and genetic studies identify IL-33 as a candidate gene for Alzheimer's disease. ..." in: **Molecular psychiatry**, Vol. 14, Issue 11, pp. 1004-16, (2009) ([PubMed](#)).

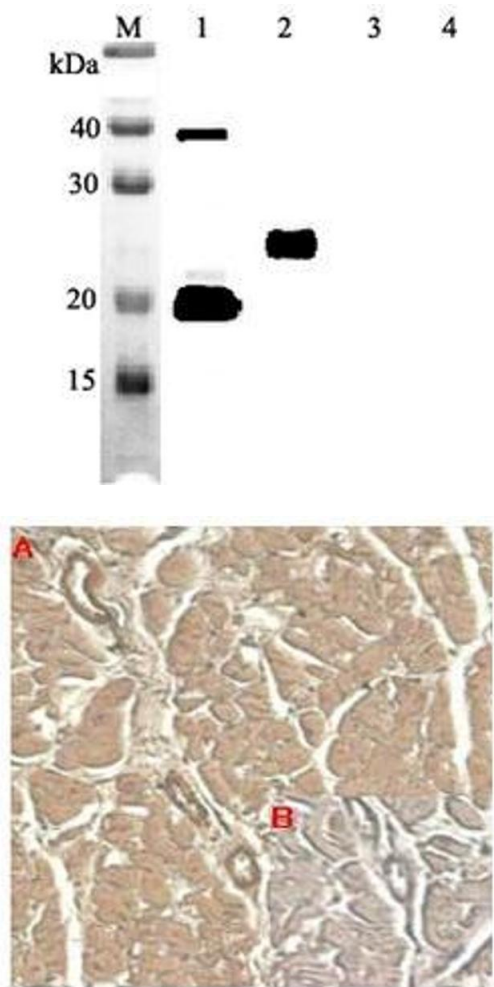
Talabot-Ayer, Lamacchia, Gabay, Palmer: "Interleukin-33 is biologically active independently of caspase-1 cleavage." in: **The Journal of biological chemistry**, Vol. 284, Issue 29, pp. 19420-6, (2009) ([PubMed](#)).

Images



ELISA

Image 1. Inhibition of binding of recombinant human IL-33 (hIL-33) to human ST2 (hST2) in vitro using anti-IL-33 (human), mAb (IL33305B). An indirect competitive ELISA was performed as follows; 1) coat microtiter plate wells with hST2-Fc (10 ug/ml); 2) add 2 ug/ml of IL-33 with or without a hIL-33 mAb to the wells followed by washing; 3) add anti-FLAG HRP conjugated (1:2,000) to an enzyme; 4) after adding the TMB solution, incubate at RT in the dark for 20 minutes. Immediately read the plate at 450 nm.



Western Blotting

Image 2. Western blot analysis of human IL-33 using anti-IL-33 (human), mAb (IL33305B) at 1:2,000 dilution. 1). Recombinant human IL-33 (His tagged). 2). Recombinant human IL-33 (FLAG ® -tagged). 3). Recombinant mouse IL-33 (FLAG ® -tagged). 4). Other protein (His tagged, negative control).

Immunohistochemistry

Image 3. Immunohistochemical staining of human tissue using anti-IL-33 (human), mAb (IL33305B) at 1:100 dilution. A. Immunoperoxidase staining (cytoplasmic) of formalin-fixed, paraffin-embedded human heart (100x, brown colour). B. Isotype control with IgG2a (negative control).

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN1169172.