

29-1011: anti-IL-33 (human), mAb (IL33305B)

Clone Name :	IL33305B
Application :	Functional Assay,ELISA,IHC
Reactivity :	Human
Alternative Name :	Interleukin-33; IL-1F11; NF-HEV
Isotype :	Mouse IgG2a,k
Immunogen Information :	Recombinant human IL-33.

Description

Recognizes human IL-33. Does not cross-react with mouse IL-33. 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 30kDa human IL33 is converted by CASP1 to a 18kDa 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

Product Info

Amount :	100 µg / 50 µg
Content :	Concentration 1mg/ml Formulation: Liquid. 0.2 µm-filtered solution in PBS, pH 7.4. Contains no preservatives
Storage condition :	Stable for at least 1 year after receipt when stored at -20°C.

Application Note

ELISA: (direct or indirect: 1:2'000-1:5'000) Functional Application (Blocking) Immunohistochemistry (paraffin sections (1:50-1:200)) Immunoprecipitation Western blot: (1:2'000-1:5'000 using ECL. Suggested blocking and dilution buffer is PBST with 0.05% Tween 20 and 5% skim milk. Suggested incubation time is 1 hour at room temperature). Optimal conditions should be determined individually for each application.

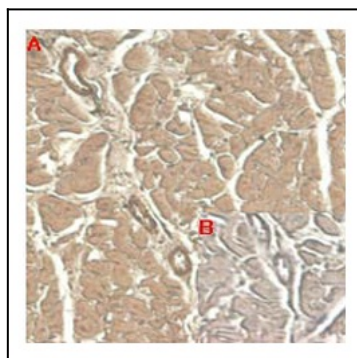


Figure 1: Immunohistochemical staining of human tissue using anti-IL-33 (human), mAb (IL33305B) at 1:100 dilution. A. Immunoperoxidase staining (cytoplasmic) of formalin-fixed, paraffin-embedded human heart (100x, brown colour). B. Isotype control with IgG2a (negative control).

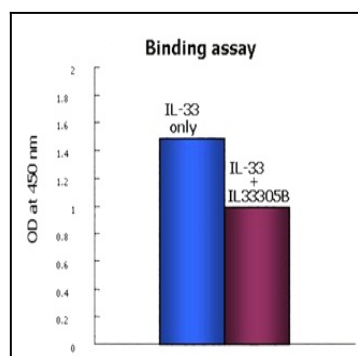


Figure 2: Inhibition of binding of recombinant human IL-33 (hIL-33) to human ST2 (hST2) in vitro using anti-IL-33 (human), mAb (IL33305B). An indirect competitive ELISA was performed as follows; 1) coat microtiter plate wells with hST2-Fc (10 ug/ml); 2) add 2 ug/ml of IL-33 with or without a hIL-33 mAb 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.

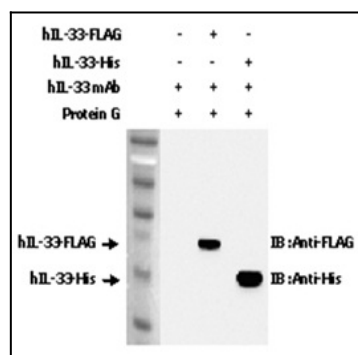


Figure 3: Immunoprecipitation of recombinant hIL-33 proteins using anti-IL-33 (human), mAb (IL33305B). Recombinant hIL-33 Proteins were precipitated. The precipitated proteins were separated by SDS-PAGE, electroblotted, and visualized by Western blot/ECL reaction with anti-FLAG or anti-His.

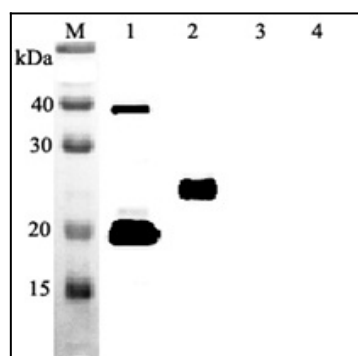


Figure 4: Western blot analysis of human IL-33 using anti-IL-33 (human), mAb (IL33305B) at 1:2,000 dilution. 1. Recombinant human IL-33 (His tagged). 2. Recombinant human IL-33 (FLAG®-tagged). 3. Recombinant mouse IL-33 (FLAG®-tagged). 4. Other protein (His tagged, negative control).