

Anti-IL-38 (IL1F10) (Human) mAb

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|--------------------|---|
| CODE No. | D358-3 |
| CLONALITY | Monoclonal |
| CLONE | H127C |
| ISOTYPE | Mouse IgG2b κ |
| QUANTITY | 100 μ L, 1 mg/mL |
| SOURCE | Purified IgG from hybridoma supernatant |
| IMMUNOGEN | Recombinant full-length Human IL-38 protein |
| FORMULATION | PBS containing 50% Glycerol (pH 7.2). No preservative is contained. |
| STORAGE | This antibody solution is stable for one year from the date of purchase when stored at -20°C. |

APPLICATIONS-CONFIRMED

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| <u>Western blotting</u> | 1 μ g/mL for chemiluminescence detection system |
| <u>Immunoprecipitation</u> | 5 μ g/2 μ g recombinant protein |

APPLICATIONS-REPORTED

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|-----------------------------|-----------------|
| <u>Immunohistochemistry</u> | Reference 1)-3) |
| <u>Sandwich ELISA</u> | Reference 3) |

SPECIES CROSS REACTIVITY on WB

| Species | Human | Mouse | Rat | Hamster |
|------------|---------------------|------------|------------|------------|
| Sample | Recombinant protein | Not tested | Not tested | Not tested |
| Reactivity | + | | | |

Entrez Gene ID 84639 (Human)

REFERENCES

- 1) Tominaga, M., *et al.*, *Respir. Investig.* **55**, 293-299 (2017)
- 2) Takada, K., *et al.*, *PLoS One* **12**, e0181598 (2017)
- 3) Takenaka, SI., *et al.*, *Biochem. Biophys. Rep.* **4**, 386-391 (2015)
- 4) Oda, H., *et al.*, *Ann. Allergy Asthma Immunol.* **112**, 23-28 (2014)
- 5) Hoshino, T., *et al.*, *Am. J. Respir. Cell Mol. Biol.* **41**, 661-670 (2009)
- 6) Kitasato, Y., *et al.*, *Am. J. Respir. Cell Mol. Biol.* **31**, 619-625 (2004)

For more information, please visit our web site <http://ruo.mbl.co.jp/>

RELATED PRODUCTS

Antibodies

| | |
|--------|---|
| D358-3 | Anti-IL-38 (IL1F10) (Human) mAb (H127C) |
| D359-3 | Anti-IL-38 (IL1F10) (Human) mAb (H160A) |
| D043-3 | Anti-IL-18 (Human) mAb (25-2G) |
| D044-3 | Anti-IL-18 (Human) mAb (125-2H) |
| D045-3 | Anti-IL-18 (Human) mAb (159-12B) |
| D045-6 | Anti-IL-18 (Human) mAb-Biotin (159-12B) |
| D046-3 | Anti-IL-18 (Mouse) mAb (39-3F) |
| D047-3 | Anti-IL-18 (Mouse) mAb (74) |
| D048-3 | Anti-IL-18 (Mouse) mAb (93-10C) |
| D048-6 | Anti-IL-18 (Mouse) mAb-Biotin (93-10C) |
| PM014 | Anti-IL-18 (Human) pAb (polyclonal) |
| M157-3 | Anti-IL-18 (Rat) mAb (21A12) |
| M158-3 | Anti-IL-18 (Rat) mAb (91D8) |
| D342-3 | Anti-IL18R1 (CD218a) (Human) mAb (H44) |
| M159-3 | Anti-IL-18 receptor 1 (Human) mAb (44G6) |
| M163-3 | Anti-IL-18 receptor 1 (Mouse) mAb (33A11) |
| M166-3 | Anti-IL-18 receptor 1 (Mouse) mAb (64G4) |
| D304-3 | Anti-IL-18 BP (Human) mAb (#36) |
| D305-3 | Anti-IL-18 BP (Human) mAb (#13) |
| D306-3 | Anti-IL-18 BP (Mouse) mAb (#36) |
| D307-3 | Anti-IL-18 BP (Mouse) mAb (#31) |
| M156-3 | Anti-pro-IL-18 (Human) mAb (43A11) |
| M138-3 | Anti-IL-33 (Human) mAb (5H1) |
| PM033 | Anti-IL-33 (Human) pAb (polyclonal) |
| M161-3 | Anti-IL-33 (Mouse) mAb (4G4) |
| M187-3 | Anti-IL-33 (Mouse) mAb FG (1F11) |
| M188-3 | Anti-IL-33 (Mouse) mAb FG (2C7) |
| D065-3 | Anti-ST2 (Human) mAb (HB12) |
| D067-3 | Anti-ST2 (Human) mAb (2A5) |
| D067-4 | Anti-ST2 (Human) mAb-FITC (2A5) |
| D067-5 | Anti-ST2 (Human) mAb-PE (2A5) |

Kits

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|------|---|
| 7620 | Human IL-18 ELISA Kit |
| 7625 | Mouse IL-18 ELISA Kit |
| 7650 | Human IL-33 Cytokine domain Detection Kit |
| 5332 | Ab-Match ASSEMBLY Mouse IL-33 kit |
| 7638 | ST2 ELISA Kit |

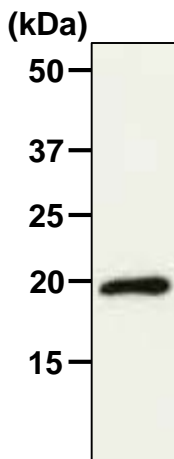
Recombinant proteins

| | |
|--------|---------------------------------------|
| B001-5 | Recombinant Human IL-18 |
| B003-5 | Recombinant Human IL-18 (without BSA) |
| B002-5 | Recombinant Mouse IL-18 |
| B004-5 | Recombinant Mouse IL-18 (without BSA) |

SDS-PAGE & Western blotting

- 1) Load 5 µg of recombinant protein per lane in a 1-mm-thick SDS-polyacrylamide gel (15% acrylamide) for electrophoresis.
- 2) Blot the protein to a polyvinylidene difluoride (PVDF) membrane at 1 mA/cm² for 1 hr. in a semi-dry transfer system (Transfer Buffer: 25 mM Tris, 190 mM glycine, 20% MeOH). See the manufacturer's manual for precise transfer procedure.
- 3) To reduce nonspecific binding, soak the membrane in 10% skimmed milk (in PBS) overnight at 4°C.
- 4) Wash the membrane with PBS-T [0.05% Tween-20 in PBS] (3 times for 5 min.).
- 5) Incubate the membrane with primary antibody diluted with 1% skimmed milk (in PBS) as suggested in the **APPLICATIONS** for 1 hr. at room temperature. (The concentration of antibody will depend on the conditions.)
- 6) Wash the membrane with PBS-T (3 times for 5 min.).
- 7) Incubate the membrane with 1:10,000 of Anti-IgG (Mouse) pAb-HRP (MBL; code no. 330) diluted with 1% skimmed milk (in PBS) for 1 hr. at room temperature.
- 8) Wash the membrane with PBS-T (3 times for 5 min.).
- 9) Wipe excess buffer on the membrane, and then incubate it with appropriate chemiluminescence reagent for 1 min. Remove extra reagent from the membrane by dabbing with paper towel, and seal it in plastic wrap.
- 10) Expose to an X-ray film for 3 min. in a dark room. Develop the film as usual. The condition for exposure and development may vary.

(Positive control for Western blotting; Recombinant protein)



Western blot analysis of human IL-38 (IL1F10)

Sample: Recombinant human IL-38

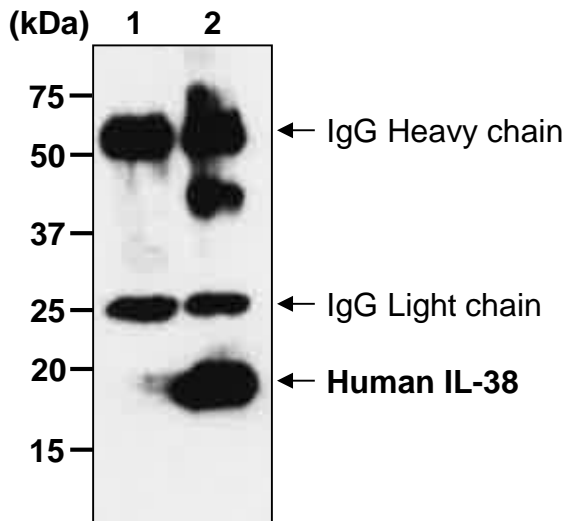
Immunoblotted with Anti-IL-38 (IL1F10) (Human) mAb (D358-3)

Sample was kindly provided by Dr. Tomoaki Hoshino (Divisions of Respiriology, Neurology, and Rheumatology, Department of Medicine, Kurume University School of Medicine).

Immunoprecipitation

- 1) Mix 20 μ L of 50% protein A agarose beads slurry resuspended in 300 μ L of IP buffer [50 mM Tris-HCl (pH 7.4), 150 mM NaCl, 0.05% NP-40] with primary antibody as suggested in the **APPLICATIONS**. Incubate with gentle agitation for 1 hr. at room temperature.
- 2) Wash the beads 3 times with 1 mL of IP buffer.
- 3) Add 2 μ g of recombinant human IL-38 and 300 μ L of IP buffer into the tube. Incubate with gentle agitation overnight at 4°C.
- 4) Wash the beads 6 times with 1 mL of IP buffer.
- 5) Resuspend the beads in 20 μ L of Laemmli's sample buffer, boil for 3 min. and centrifuge.
- 6) Load 10 μ L per lane in a 1-mm-thick SDS-polyacrylamide gel (15% acrylamide) for electrophoresis.
- 7) Blot the protein to a polyvinylidene difluoride (PVDF) membrane at 1 mA/cm² for 1 hr. in a semi-dry transfer system (Transfer Buffer: 25 mM Tris, 190 mM glycine, 20% MeOH). See the manufacturer's manual for precise transfer procedure.
- 8) To reduce nonspecific binding, soak the membrane in 10% skimmed milk (in PBS) overnight at 4°C.
- 9) Incubate the membrane with primary antibody diluted with 1% skimmed milk (in PBS) as suggested in the **APPLICATIONS** for 1 hr. at room temperature. (The concentration of antibody will depend on the conditions.)
- 10) Wash the membrane with PBS-T [0.05% Tween-20 in PBS] (3 times for 5 min.).
- 11) Incubate the membrane with 1:10,000 of Anti-IgG (Mouse) pAb-HRP (MBL; code no. 330) diluted with 1% skimmed milk (in PBS) for 1 hr. at room temperature.
- 12) Wash the membrane with PBS-T (3 times for 5 min.).
- 13) Wipe excess buffer on the membrane, and then incubate it with appropriate chemiluminescence reagent for 1 min. Remove extra reagent from the membrane by dabbing with paper towel, and seal it in plastic wrap.
- 14) Expose to an X-ray film for 3 min. in a dark room. Develop the film as usual. The condition for exposure and development may vary.

(Positive control for Immunoprecipitation; Recombinant protein)



Immunoprecipitation of human IL-38 (IL1F10)

Sample: Recombinant human IL-38

Lane 1: Mouse IgG2b (isotype control) (M077-3)

Lane 2: Anti-IL-38 (IL1F10) (Human) mAb (D358-3)

Immunoblotted with Anti-IL-38 (IL1F10) (Human) mAb (D358-3)

Sample was kindly provided by Dr. Tomoaki Hoshino (Divisions of Respiriology, Neurology, and Rheumatology, Department of Medicine, Kurume University School of Medicine).