

IL-1F5 (G-15): sc-51298

BACKGROUND

IL-1 (Interleukin-1) is a cytokine responsible for initiating a variety of activities through the activation of transcription factors, NF κ B and AP-1, thereby promoting host response to injury or infection. The IL-1 superfamily is comprised of several ligands and receptors. IL-1F5, also known as IL-1 δ , IL-1 like protein 1 (IL-1L1), IL-1HY1, IL-1ra (receptor antagonist) homolog 1 or IL-1 related protein 3 (IL-1rp3), is a secreted ligand belonging to this superfamily. IL-1F5 is expressed in monocytes and macrophages and is activated by endotoxins. It shares 47% sequence identity with IL-1ra and similarly lacks the loop between the fourth and fifth β -strands. IL-1F5 acts as an antagonist, inhibiting the IL-1F9 activation of NF κ B. Similar to other family members, IL-1F5 can be regulated by bacterial lipopolysaccharide (LPS).

REFERENCES

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- Smith, D.E., et al. 2000. Four new members expand the interleukin-1 superfamily. *J. Biol. Chem.* 275: 1169-1175.
- Kumar, S., et al. 2000. Identification and initial characterization of four novel members of the interleukin-1 family. *J. Biol. Chem.* 275: 10308-10314.
- Busfield, S.J., et al. 2000. Identification and gene organization of three novel members of the IL-1 family on human chromosome 2. *Genomics* 66: 213-216.
- Debets, R., et al. 2001. Two novel IL-1 family members, IL-1 antagonist and agonist of NF κ B activation through the orphan IL-1 receptor-related protein 2. *J. Immunol.* 167: 1440-1446.
- Dunn, E.F., et al. 2003. High-resolution structure of murine interleukin-1 homologue IL-1F5 reveals unique loop conformations for receptor binding specificity. *Biochemistry* 42: 10938-10944.

CHROMOSOMAL LOCATION

Genetic locus: IL36RN (human) mapping to 2q13; Il1f5 (mouse) mapping to 2 A3.

SOURCE

IL-1F5 (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of IL-1F5 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-51298 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

IL-1F5 (G-15) is recommended for detection of IL-1F5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

IL-1F5 (G-15) is also recommended for detection of IL-1F5 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for IL-1F5 siRNA (h): sc-72166, IL-1F5 siRNA (m): sc-72167, IL-1F5 shRNA Plasmid (h): sc-72166-SH, IL-1F5 shRNA Plasmid (m): sc-72167-SH, IL-1F5 shRNA (h) Lentiviral Particles: sc-72166-V and IL-1F5 shRNA (m) Lentiviral Particles: sc-72167-V.

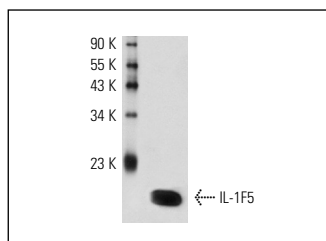
Molecular Weight of IL-1F5: 17 kDa.

Positive Controls: IL-1F5 (h): 293T Lysate: sc-113962.

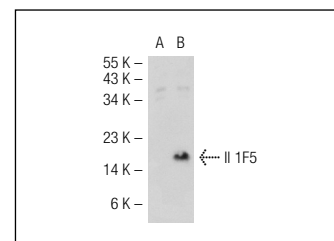
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



IL-1F5 (G-15): sc-51298. Western blot analysis of human recombinant IL-1F5.



IL-1F5 (G-15): sc-51298. Western blot analysis of IL-1F5 expression in non-transfected: sc-117752 (A) and human IL-1F5 transfected: sc-113962 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

MONOS
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Try **IL-1F5 (D-11): sc-398515**, our highly recommended monoclonal alternative to IL-1F5 (G-15).