

IL-1F5 (D-11): sc-398515

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

1. Mulero, J.J., et al. 1999. IL1HY1: a novel interleukin-1 receptor antagonist gene. *Biochem. Biophys. Res. Commun.* 263: 702-706.
2. Smith, D.E., et al. 2000. Four new members expand the interleukin-1 superfamily. *J. Biol. Chem.* 275: 1169-1175.
3. Kumar, S., et al. 2000. Identification and initial characterization of four novel members of the interleukin-1 family. *J. Biol. Chem.* 275: 10308-10314.
4. 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.
5. 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.

CHROMOSOMAL LOCATION

Genetic locus: IL36RN (human) mapping to 2q13; IL1f5 (mouse) mapping to 2 A3.

SOURCE

IL-1F5 (D-11) is a mouse monoclonal antibody raised against amino acids 26-110 mapping within an internal region of IL-1F5 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

IL-1F5 (D-11) is available conjugated to agarose (sc-398515 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398515 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398515 PE), fluorescein (sc-398515 FITC), Alexa Fluor[®] 488 (sc-398515 AF488), Alexa Fluor[®] 546 (sc-398515 AF546), Alexa Fluor[®] 594 (sc-398515 AF594) or Alexa Fluor[®] 647 (sc-398515 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-398515 AF680) or Alexa Fluor[®] 790 (sc-398515 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

IL-1F5 (D-11) is recommended for detection of IL-1F5 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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.

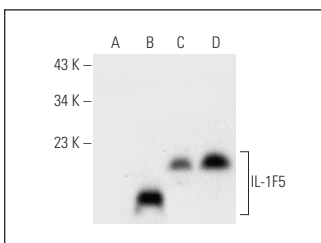
Molecular Weight of IL-1F5: 17 kDa.

Positive Controls: IL-1F5 (h): 293T Lysate: sc-113962, HL-60 whole cell lysate: sc-2209 or SK-N-MC cell lysate: sc-2237.

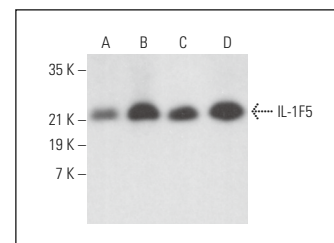
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



IL-1F5 (D-11): sc-398515. Western blot analysis of IL-1F5 expression in non-transfected 293T: sc-117752 (A), human IL-1F5 transfected 293T: sc-113962 (B), HL-60 (C) and SK-N-MC (D) whole cell lysates.



IL-1F5 (D-11): sc-398515. Western blot analysis of IL-1F5 expression in RAW 264.7 (A), HeLa (B), Jurkat (C) and K-562 (D) whole cell lysates.

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.