

Interleukin 1 Beta (IL1b) Active Protein | IL1b active protein

Active Interleukin 1 Beta (IL1b)

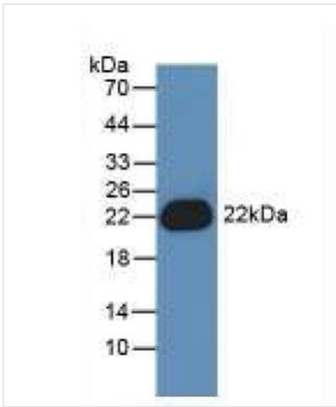
CATALOG # AAA21056	HOST 293F cell	REACTIVITY Homo sapiens (Human)	APPLICATIONS Cell Culture, Activity Assay, Invivo Assay
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PRODUCT SYNONYMS

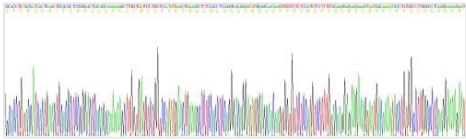
Interleukin 1 Beta (IL1b); Active Interleukin 1 Beta (IL1b); IL1-B; IL1-Beta; IL1F2; IL-1beta; Interleukin-1 Family Member 2; Catabolin; IL1b active protein

PRODUCT SPECIFICATIONS

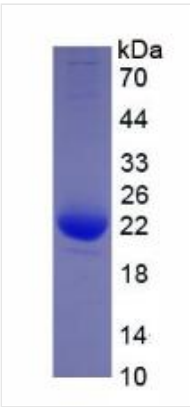
Host	293F cell
Reactivity	Homo sapiens (Human)
Purity/Purification	>95%
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 5% Trehalose
Concentration	200ug/mL (varies by lot)
Applicable Applications for IL1b active protein	Cell Culture, Activity Assay, Invivo Assay
Application Notes	(May be suitable for use in other assays to be determined by the end user.)
Source	Eukaryotic expression.
Residues	Ala117~Ser269
Tags	N-terminal His-tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method).
Predicted isoelectric point	5.9
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Storage: Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months. Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition



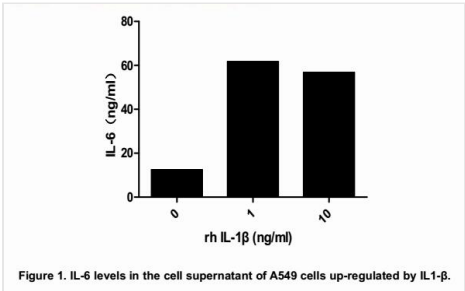
WB (Western Blot)
Western BlotSample: Recombinant IL1b, HumanAntibody: Rabbit Anti-Human IL1b Ab



Gene Sequencing (extract)



SDS-PAGE
Sample: Active recombinant IL1b, Human



Application Data

Sample (cell supernatant of A549 cells)	O.D. value	Corrected	Concentration of IL-6 (ng/mL)
stimulated with IL-1β(1ng/mL)	1.04	0.975	61.71
stimulated with IL-1β(10ng/mL)	0.966	0.901	56.77
unstimulated	0.309	0.244	12.44

Table 1. IL-6 levels in the cell supernatant of A549 cells up-regulated by IL-1β

APVR SLNCTLRDSQ QKSLVMSGPY ELKALHLQGQ
DMEQQVVFSM SFVQGEESND KIPVALGLKE KNLYLSCVLK DDKPTLQLES
VDPKNYPKKK MEKRFVFNKI EINNKLFEFS AQFPNWIYST SQAENMPVFL
GGTKGGQDIT DFTMQFVSS

Sequence Information

Activity
Interleukin-1 beta belongs to the interleukin 1 cytokine family, which plays a critical role in inflammation, immunity, antiviral responses, and a variety of diseases. It has been reported that IL-1β-induced IL-6 production is mediated by both PI3K and IRAK4 in A549 cells. To test the bioactivity of IL-1β, A549 cells were seeded into 24-well plate at a density of 1x10⁵ cells/mL, and allowed to attach overnight before treated with or without certain concentrations (1ng/mL, 10ng/mL) of IL1-β for 4h and IL-6 levels in the cell supernatant were determined by ELISA.Result: IL-6 levels in the cell supernatant of A549 cells increased significantly after stimulated with IL1-β, the data was shown in Table 1 and Figure 1.

ADDITIONAL INFORMATION

Product Categories/Family for IL1b active protein	Active Protein
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NCBI AND UNIPROT INFORMATION

NCBI GI #	10835145
NCBI GeneID	3553
NCBI Accession #	NP_000567.1
NCBI GenBank Nucleotide #	NM_000576.2
UniProt Accession #	P01584; Q53X59; Q53XX2; Q7M4S7; Q7RU01; Q96HE5; Q9UCT6
Molecular Weight	Predicted Molecular Mass: 19.0kDa Accurate Molecular Mass: 22kDa as determined by SDS-PAGE reducing conditions.

NCBI Official Full Name	interleukin-1 beta proprotein
NCBI Official Synonym Full Names	interleukin 1 beta
NCBI Official Symbol	IL1B
NCBI Official Synonym Symbols	IL-1; IL1F2; IL1-BETA
NCBI Protein Information	interleukin-1 beta
UniProt Protein Name	Interleukin-1 beta
UniProt Gene Name	IL1B
UniProt Synonym Gene Names	IL1F2; IL-1 beta

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/293f-homo-sapiens-human-active-protein/interleukin-1-beta-il1b/21056>