

Caspase 1 (CASP1) Active Protein | CASP1 active protein

Active Caspase 1 (CASP1)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA148192	E Coli	Rat	Activity Assay, Cell Culture

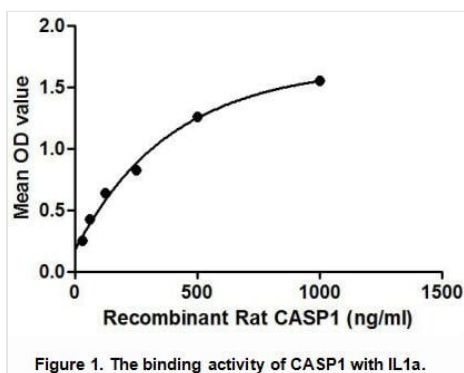
PRODUCT SYNONYMS

Caspase 1 (CASP1); Active Caspase 1 (CASP1); ICE; IL1BC; IL1-BC; P45; Interleukin 1 Beta Converting Enzyme; Apoptosis-Related Cysteine Peptidase; Interleukin-1 beta convertase; CASP1 active protein

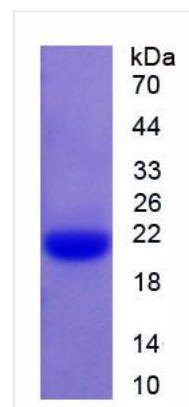
PRODUCT SPECIFICATIONS

Host	E Coli
Reactivity	Rat
Purity/Purification	> 95%
Form/Format	Freeze-dried powder
Sequence Length	402
Applicable Applications for CASP1 active protein	Activity Assay, Cell Culture
Tag	N-terminal His Tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Fragment	Asn119~Asp296
Isoelectric Point	7.7

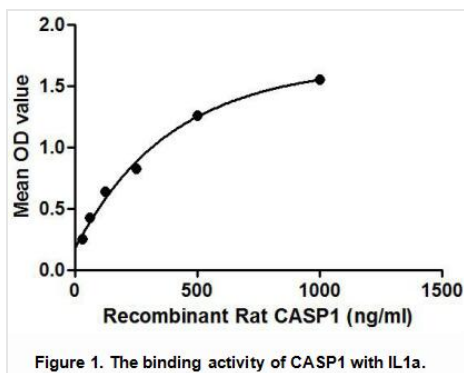
IMAGES



Application Data



SDS-PAGE



Activity

Caspase 1 (CASP1) cleaves IL-1 beta between an Asp and an Ala, releasing the mature cytokine which is involved in a variety of inflammatory processes. It also has lots of other function, such as defenses against pathogens, cleaves and activates sterol regulatory element binding proteins (SREBPs), promotes apoptosis. Besides, Interleukin 1 Alpha (IL1a) has been identified as an interactor of CASP1, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat CASP1 and recombinant rat IL1a. Briefly, CASP1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to IL1a-coated microtiter wells and incubated for 2h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-CASP1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of CASP1 and IL1a was shown in Figure 1, and this effect was in a dose dependent manner.

ADDITIONAL INFORMATION

Product Categories/Family for CASP1 active protein

Signal transduction; Enzyme & Kinase; Apoptosis; Infection immunity

NCBI AND UNIPROT INFORMATION

NCBI GI #	1170463
NCBI GeneID	25166
UniProt Accession #	P43527
Molecular Weight	Predicted Molecular Weight: 21.2kDa Accurate Molecular Weight: 21kDa
NCBI Official Full Name	Caspase-1
NCBI Official Synonym Full Names	caspase 1
NCBI Official Symbol	Casp1
NCBI Official Synonym Symbols	Ice; Il1bc
NCBI Protein Information	caspase-1
UniProt Protein Name	Caspase-1
UniProt Gene Name	Casp1
UniProt Synonym Gene Names	Il1bc; Il1bce; CASP-1; IL-1BC; ICE; IL-1 beta-converting enzyme

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.