Active Recombinant Human PRTN3 Protein, His-tagged

Cat. No. PRTN3-1996H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human PRTN3 Protein(His71~Leu247), fused with N-terminal His tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	71-247 aa
Form	PBS, pH7.4, containing 0.01% Sarcosyl, 5%Trehalose.
Bio-activity	Proteinase 3 (PR3) is a serine protease mainly expressed in azurophilic granules of neutrophils. Structurally, it consists of a catalytic domain and a pro - domain. Functionally, PR3 is crucial for neutrophil - mediated immune responses. It can cleave various extracellular matrix proteins and bioactive peptides, playing roles in processes like neutrophil extracellular trap (NET) formation and degradation of pathogens. In diseases, abnormal PR3 activity is associated with autoimmune disorders such as granulomatosis with polyangiitis, where autoantibodies against PR3 are characteristic.The binding of PR3 to IL32 has been reported to enhance the inflammatory response.Thus a functional ELISA assay was conducted to detect the interaction of recombinant human PR3 and recombinant human IL32. Briefly, PR3 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to IL32-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-PR3 pAb, then

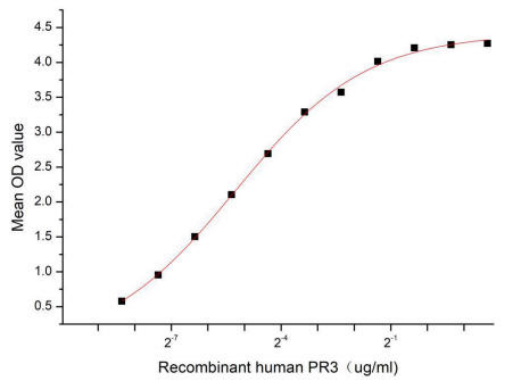
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	aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37°C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µ stop solution to the wells and read at 450/630nm immediately. The binding activity of recombinant human PR3 and recombinant human IL32 was shown, the EC50 for this effect is 0.026ug/mL.
Molecular Mass	20.8kDa
Endotoxin	<1.0EU per 1µg (determined by the LAL method).
Purity	>90%
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month, -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

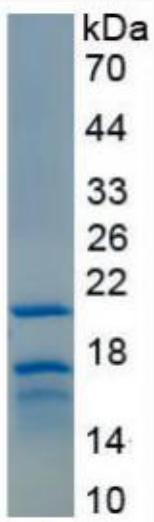
GENE INFORMATION

Gene Name	PRTN3 proteinase 3 [Homo sapiens]
Official Symbol	PRTN3
Synonyms	PRTN3; proteinase 3; myeloblastin; ACPA; AGP7; C ANCA; MBT; P29; PR 3; serine proteinase; neutrophil; Wegener granulomatosis autoantigen; NP-4; C-ANCA antigen; wegener autoantigen; leukocyte proteinase 3; neutrophil proteinase 4; azurophil granule protein 7; serine proteinase, neutrophil; MBN; NP4; PR3; PR-3; CANCA; C-ANCA;

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Gene ID	5657
mRNA Refseq	NM_002777
Protein Refseq	NP_002768
MIM	177020
UniProt ID	P24158
Activity	

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