

Active Recombinant Human ITIH4 protein, His-tagged

Cat. No. ITIH4-4067H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human ITIH4 protein(Q14624)(29-157 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	29-157 aa
Form	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Bio-activity	Inter Alpha-Globulin Inhibitor H4 (ITIH4) is secreted into the blood, where it is cleaved by plasma kallikrein into two smaller forms. ITIH4 has been detected only in liver, and it seems to be upregulated during surgical trauma. It may also play a role in liver development or regeneration. Besides, Tau Protein (MAPT) has been identified as an interactor of ITIH4, thus a binding ELISA assay was conducted to detect the interaction of recombinant human ITIH4 and recombinant human MAPT. Briefly, ITIH4 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to MAPT-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-ITIH4 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, 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 µl stop solution to the wells and read at 450 nm immediately. The binding activity of ITIH4 and MAPT

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was shown, the EC50 for this effect is 0.18 ug/mL.

Molecular Mass	15.5kDa
Endotoxin	<1.0EU per 1µg (determined by the LAL method).
Purity	> 97%
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Store at -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	ITIH4 inter-alpha-trypsin inhibitor heavy chain family, member 4 [Homo sapiens]
Official Symbol	ITIH4
Synonyms	ITIH4; inter-alpha-trypsin inhibitor heavy chain family, member 4; inter alpha (globulin) inhibitor H4 (plasma Kallikrein sensitive glycoprotein) , ITIHL1; inter-alpha-trypsin inhibitor heavy chain H4; H4P; IHRP; plasma Kallikrein sensitive glycoprotein; ITI heavy chain H4; inter-alpha-inhibitor heavy chain 4; plasma kallikrein-sensitive glycoprotein 120; inter-alpha-trypsin inhibitor, heavy chain-like, 1; inter-alpha-trypsin inhibitor family heavy chain-related protein; inter-alpha (globulin) inhibitor H4 (plasma Kallikrein-sensitive glycoprotein); GP120; PK120; ITIHL1; PK-120; ITI-HC4; DKFZp686G21125;
Gene ID	3700

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mRNA Refseq	NM_001166449
Protein Refseq	NP_001159921
MIM	600564
UniProt ID	Q14624

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