

Active Recombinant Human ITIH4 protein, His-tagged

Cat. No. ITIH4-2344H Lot. No. (See product label)

SPECIFICATION

| | |
|-------------------------|--|
| Product Overview | Active Recombinant Human ITIH4 protein(Q14624)(683-928 aa), fused with N-terminal His tag, was expressed in E.coli. |
| Species | Human |
| Source | E.coli |
| ProteinLength | 683-928 aa |
| Form | 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300. |
| Bio-activity | <p>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, Growth Factor Receptor Bound Protein 2 (Grb2) 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 Grb2. Briefly, ITIH4 were diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to Grb2-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 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally,</p> |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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add 50 μ stop solution to the wells and read at 450nm immediately. The binding activity of ITIH4 and Grb2 was shown, and this effect was in a dose dependent manner.

Molecular Mass 28.9kDa

Endotoxin <1.0EU per 1 μ g (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 20mM Tris, 150mM NaCl (pH8.0) 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;

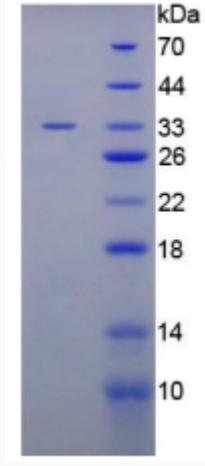
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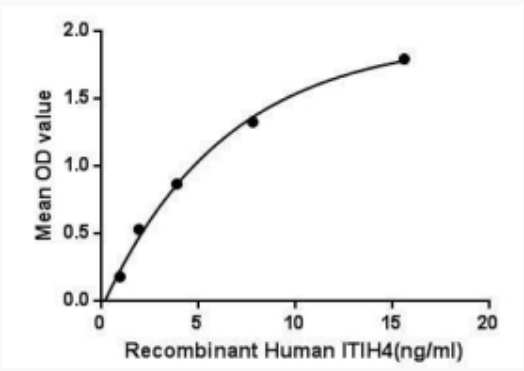
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|-----------------------|--------------|
| Gene ID | 3700 |
| mRNA Refseq | NM_001166449 |
| Protein Refseq | NP_001159921 |
| MIM | 600564 |
| UniProt ID | Q14624 |

SDS-PAGE



Activity



| Recombinant Human ITIH4 (ng/ml) | Mean OD value |
|---------------------------------|---------------|
| 0 | 0.0 |
| 1 | 0.2 |
| 2 | 0.5 |
| 4 | 0.8 |
| 8 | 1.3 |
| 15 | 1.8 |

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