Human ITIH4 Antibody  
Antigen Affinity-purified Polyclonal Sheep IgG 
Catalog Number: AF8157  

DESCRIPTION
Species Reactivity  
Human

Specificity  
Detects human ITIH4 in direct ELISAs and Western blots. In direct ELISAs, less than 2% cross-reactivity with recombinant human ITIH1 is observed.

Source  
Polyclonal Sheep IgG

Purification  
Antigen Affinity-purified

Immunogen  
Chinese hamster ovary cell line CHO-derived recombinant human ITIH4 Glu29-Leu930 (Ile85Asn, Pro698Thr)

Accession # Q14624

Formulation  
Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

*Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

APPLICATIONS
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

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<th>Recommended Concentration</th>
<th>Sample</th>
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<tr>
<td>Western Blot</td>
<td>1 μg/mL</td>
<td>See Below</td>
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DATA

Western Blot  
Detection of Human ITIH4 by Western Blot. Western blot shows human plasma. PVDF membrane was probed with 1 μg/mL of Sheep Anti-Human ITIH4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8157) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for ITIH4 at approximately 120 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE
Reconstitution  
Reconstitute at 0.2 mg/mL in sterile PBS.

Shipping  
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage  
Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND
The inter-α-trypsin inhibitor heavy chain (ITIH4), also known as IHRP (inter-α-trypsin heavy chain-related protein), PK-120 (plasma kallikrein-sensitive glycoprotein 120), or Gp120 (glycoprotein 120), is a secreted, 120 kDa, 930 amino acid (aa), N-glycosylated Type II acute phase protein. It is upregulated in response to trauma such as ischemic stroke or myocardial infarction, and functions as a trypsin inhibitor. It is activated by Kallikrein by cleavage between aa 688-689, creating 100 kDa and 35 kDa portions. Mature human ITIH4 shares 66% aa sequence identity with mouse and rat ITIH4. Human isoforms lacking aa 621-650 (914, 900 and 845 aa forms), aa 727-866 and 851-866 (845 aa) and having 14 aa inserted after aa 727 (914 aa) have been described. Proteolytic cleavage by plasma kallikrein produces a 100 kDa fragment that is further processed to 70 kDa, and 35 kDa fragments. An O-glycosylated form is reported in urine, but not in plasma.