

#### DESCRIPTION

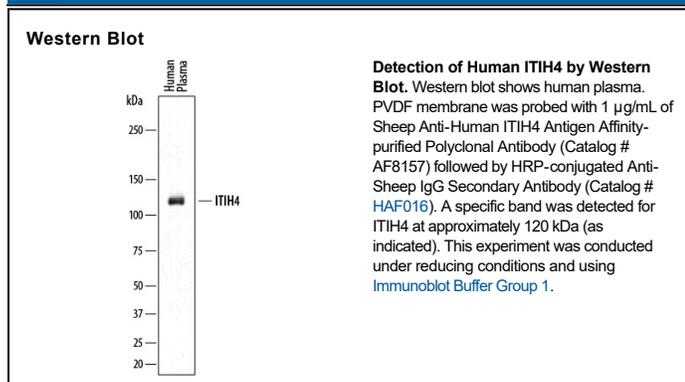
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human ITIH4 in direct ELISAs and Western blots. In direct ELISAs, less than 2% cross-reactivity with recombinant human ITIH1 is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant human ITIH4 Glu29-Leu930 (Ile85Asn, Pro698Thr) Accession # Q14624
<b>Formulation</b>	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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below

#### DATA



#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### BACKGROUND

The inter- $\alpha$ -trypsin inhibitor heavy chain (ITIH4), also known as IHRP (inter- $\alpha$ -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 727-765 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.