

## 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>Conjugate</b>	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
<b>Formulation</b>	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

## 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.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

## 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.

## PRODUCT SPECIFIC NOTICES

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