Human HTRA1/PRSS11 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF2916

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human HTRA1/PRSS11 in direct ELISAs and Western blots. In direct ELISAs, less than 3% cross-reactivity with recombinant human HTRA2 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human HTRA1/PRSS11 Gly156-Pro480 Accession # Q92743
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.

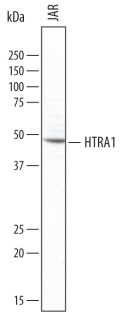
APPLICATIONS

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.*

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Simple Western	10 µg/mL	See Below

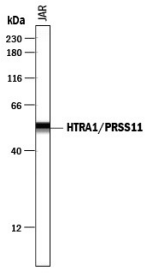
DATA

Western Blot



Detection of Human HTRA1/PRSS11 by Western Blot. Western blot shows lysates of JAR human choriocarcinoma cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human HTRA1/PRSS11 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2916) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for HTRA1/PRSS11 at approximately 50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Simple Western



Detection of Human HTRA1/PRSS11 by Simple Western™. Simple Western lane view shows lysates of JAR human choriocarcinoma cell line, loaded at 0.2 mg/mL. A specific band was detected for HTRA1/PRSS11 at approximately 54 kDa (as indicated) using 10 µg/mL of Sheep Anti-Human HTRA1/PRSS11 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2916) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	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
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

HTRA1 is a member of the mammalian HTRA (high temperature requirement A) serine protease family. The *E. coli* HTRA homolog functions as a chaperone-protease and is essential for bacterial survival at temperatures above 42 °C (1). Among the four mammalian HTRA proteins, HTRA1, -3 and -4 are secreted while HTRA2 is localized in mitochondria. HTRA1 contains an N-terminal insulin-like growth factor binding protein (IGFBP) domain, a Kazal-type trypsin inhibitor motif, and C-terminal trypsin-like protease and PDZ domains (2). It is involved in several pathologies including Alzheimer's disease (3), rheumatoid arthritis (4), osteoarthritis (5) and age-related macular degeneration (6), although the mechanisms by which HTRA1 exerts its effects are not clear. HTRA1 also has properties of a tumor suppressor protein, which makes it a target for cancer therapy (7). In addition HTRA1 is known to regulate the TGF-β signaling pathway and bone mineralization (8, 9). rhHTRA1 lacks the N-terminal IGFBP and Kazal-like domains, but retains the serine protease and PDZ domains.

References:

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6. Dewan, A. *et al.* (2006) Science **314**:989.
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