

# HtrA1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1331b

#### **Specification**

### HtrA1 Antibody (C-term) - Product Information

**Application** WB, IHC-P,E **Primary Accession** 092743 Other Accession 090ZK5 Reactivity Human Predicted Rat Host Rabbit Clonality **Polyclonal** Isotype Rabbit IgG Antigen Region 381-412

#### HtrA1 Antibody (C-term) - Additional Information

#### **Gene ID 5654**

#### **Other Names**

Serine protease HTRA1, 3421-, High-temperature requirement A serine peptidase 1, L56, Serine protease 11, HTRA1, HTRA, PRSS11

#### Target/Specificity

This HtrA1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 381-412 amino acids from the C-terminal region of human HtrA1.

#### **Dilution**

WB~~1:1000 IHC-P~~1:50~100

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

HtrA1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### HtrA1 Antibody (C-term) - Protein Information

### Name HTRA1



### Synonyms HTRA, PRSS11

**Function** Serine protease with a variety of targets, including extracellular matrix proteins such as fibronectin. HTRA1-generated fibronectin fragments further induce synovial cells to up-regulate MMP1 and MMP3 production. May also degrade proteoglycans, such as aggrecan, decorin and fibromodulin. Through cleavage of proteoglycans, may release soluble FGF-glycosaminoglycan complexes that promote the range and intensity of FGF signals in the extracellular space. Regulates the availability of insulin-like growth factors (IGFs) by cleaving IGF- binding proteins. Inhibits signaling mediated by TGF-beta family members. This activity requires the integrity of the catalytic site, although it is unclear whether TGF-beta proteins are themselves degraded. By acting on TGF-beta signaling, may regulate many physiological processes, including retinal angiogenesis and neuronal survival and maturation during development. Intracellularly, degrades TSC2, leading to the activation of TSC2 downstream targets.

#### **Cellular Location**

Cell membrane. Secreted Cytoplasm, cytosol. Note=Predominantly secreted (PubMed:15208355). Also found associated with the plasma membrane (PubMed:21297635).

#### **Tissue Location**

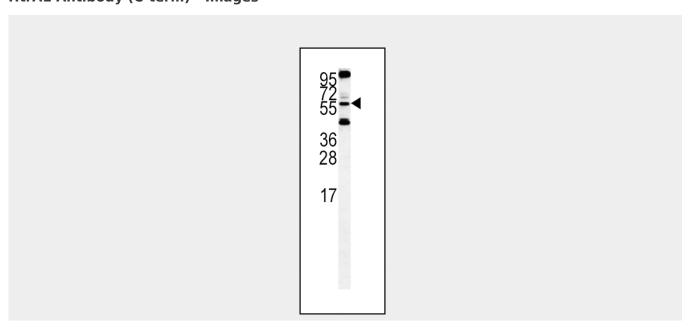
Widely expressed, with strongest expression in placenta (at protein level). Secreted by synovial fibroblasts. Up- regulated in osteoarthritis and rheumatoid arthritis synovial fluids and cartilage as compared with non-arthritic (at protein level)

#### HtrA1 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

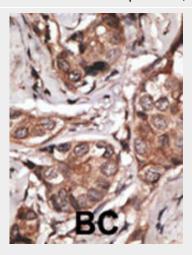
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# HtrA1 Antibody (C-term) - Images





HtrA1-K396 (Cat. #AP1331b) western blot analysis in Hela cell line lysates (35ug/lane). This demonstrates the HtrA1 antibody detected the HtrA1 protein (arrow).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

### HtrA1 Antibody (C-term) - Background

HtrA1 is a member of the trypsin family of serine proteases. This protein is a secreted enzyme that is proposed to regulate the availability of insulin-like growth factors (IGFs) by cleaving IGF-binding proteins. It has also been suggested to be a regulator of cell growth.

#### HtrA1 Antibody (C-term) - References

Howes, N., et al., Clin Gastroenterol Hepatol 2(3):252-261 (2004). Chien, J., et al., Oncogene 23(8):1636-1644 (2004). Hu, S.I., et al., J. Biol. Chem. 273(51):34406-34412 (1998). Zumbrunn, J., et al., Genomics 45(2):461-462 (1997). Zumbrunn, J., et al., FEBS Lett. 398 (2-3), 187-192 (1996).

# HtrA1 Antibody (C-term) - Citations

• Identification of a novel HtrA1-susceptible cleavage site in human aggrecan: evidence for the involvement of HtrA1 in aggrecan proteolysis in vivo.