

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

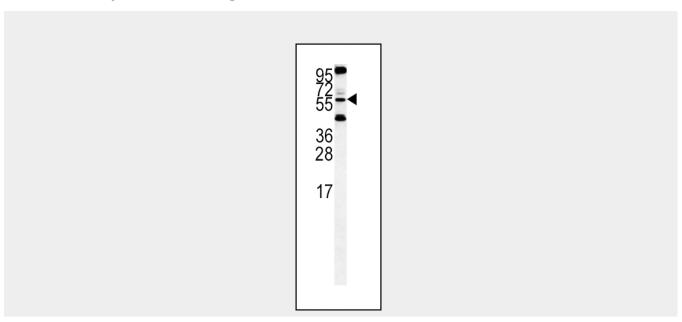
Widely expressed, with strongest expression in placenta (at protein level). Secreted by synovial fibroblasts. Up- regulated in osteoarthritis and rheumatoid arthritis synovial fluids and cartilage as compared with non-arthritic (at protein level)

HtrA1 Antibody (C-term) - Protocols

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

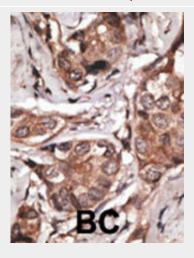
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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.