

HtrA1 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP1331b

Specification

HtrA1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

092743

HtrA1 Antibody (C-term) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody AP1331b was selected from the C-term region of human HtrA1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

HtrA1 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

Blocking Peptides

HtrA1 Antibody (C-term) Blocking Peptide - Images

HtrA1 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - 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).