

## HtrA1 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP1331a

## **Specification**

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

Primary Accession <u>Q92743</u>

HtrA1 Antibody (N-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 <a href=/product/pr oducts/AP1331a>AP1331a</a> was selected from the N-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 (N-term) Blocking Peptide - Protein Information

Name HTRA1

# HtrA1 Antibody (N-term) Blocking Peptide - Background

HtrA1 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 (N-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).



## 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. Upregulated in osteoarthritis and rheumatoid arthritis synovial fluids and cartilage as compared with non-arthritic (at protein level)

## HtrA1 Antibody (N-term) Blocking Peptide - Protocols

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

• Blocking Peptides