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HtrA3 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP1332b

Specification

HtrA3 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession	P83110

HtrA3 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 94031

Other Names
Serine protease HTRA3, 3421-, High-temperature requirement factor A3, Pregnancy-related serine protease, HTRA3, PRSP

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP1332b was selected from the C-term region of human HtrA3. 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.

HtrA3 Antibody (C-term) Blocking Peptide - Protein Information

Name HTRA3

Synonyms PRSP

Function
Serine protease that cleaves beta-casein/CSN2 as well as several extracellular matrix (ECM) proteoglycans such as decorin/DCN, biglycan/BGN and fibronectin/FN1. Inhibits signaling mediated by TGF- beta family proteins possibly indirectly by degradation of these ECM proteoglycans (By similarity). May act as a tumor suppressor. Negatively regulates, in vitro, trophoblast invasion during placental development and may be involved in the development of the placenta in vivo. May also have a role in ovarian development, granulosa cell differentiation and luteinization (PubMed:21321049, PubMed:22229724).

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Cellular Location
Secreted. Note=Secretion increased during decidualization of endometrial stromal cells

Tissue Location
Widely expressed, with highest levels in both adult and fetal heart, ovary, uterus placenta, and bladder. In the endometrium, expressed in epithelial glands and the stroma. Also present in leukocytes. Isoform 1 is predominant in heart and skeletal muscle, whereas isoform 2 is predominant in placenta and kidney

HtrA3 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

HtrA3 Antibody (C-term) Blocking Peptide - Images

HtrA3 Antibody (C-term) Blocking Peptide - Background

Insulin-like growth factors (IGFs) stimulate the proliferation and differentiation of a vast number of cell types. The action of the growth factors is mediated and controlled by a complex system of components, including several proteases that cleave the IGF-Binding Proteins. HtrA1 is a 480 aa protein that contains an N-terminus homologous to MAC25 (IGFBP7) with a conserved Kazal-type serine protease inhibitor motif, as well as a C-terminal PDZ domain. Semiquantitative RT-PCR and immunoblot analyses showed an approximately 7-fold increase of PRSS11 in osteoarthritis cartilage compared with controls. HTRA2 is released from mitochondria and inhibits the function of XIAP by direct binding in a way similar to SMAC. Moreover, when overexpressed extramitochondrially, HTRA2 induced atypical cell death, which was neither accompanied by a significant increase in caspase activity nor inhibited by caspase inhibitors, including XIAP. A catalytically inactive mutant of HTRA2, however, did not induce cell death. Suzuki et al. (2001) concluded that HTRA2 is a SMAC-like inhibitor of IAP (inhibitor of apoptosis proteins) activity with a serine protease-dependent cell death-inducing activity.

HtrA3 Antibody (C-term) Blocking Peptide - References

Nie, G.Y., et al., Biochem. J. 371 (Pt 1), 39-48 (2003).