

Anti-HtrA3 Picoband Antibody

Catalog # ABO10318

Product Information

Application	WB
Primary Accession	P83110
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Serine protease HTRA3(HTRA3) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	94031
Other Names	Serine protease HTRA3, 3.4.21.-, High-temperature requirement factor A3, Pregnancy-related serine protease, HTRA3, PRSP
Calculated MW	48608
Application Details	Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Secreted . Secretion increased during decidualization of endometrial stromal cells.
Tissue Specificity	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. .
Source	Eukaryota
Protein Name	Serine protease HTRA3
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human HtrA3 (330-362aa FAIPSDRITRFLTEFQDKQIKDWKKRFIGIRMR), different from the related mouse sequence by four amino acids, and from the related rat sequence by three amino acids.
Purification	Immunogen affinity purified.

Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

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- β 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).
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

Background

Human HtrA3 protease, which induces mitochondria-mediated apoptosis, can be a tumor suppressor and a potential therapeutic target in the treatment of cancer. It may also have a role in ovarian development, granulosa cell differentiation and luteinization. The long isoform, HTRA3L, contains 453 amino acids and has a predicted molecular mass of 49 kD. It contains an N-terminal signal peptide, followed by an insulin/IGF (see 147440)-binding domain, a Kazal-type S protease inhibitor domain, a trypsin protease domain, and a PDZ domain. The short isoform, HTRA3S, contains 357 amino acids and has a predicted molecular mass of 38 kD.

Images

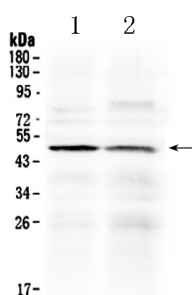


Figure 1. Western blot analysis of HtrA3 using anti- HtrA3 antibody (ABO10318). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: PANC-1 whole Cell lysates, Lane 2: HEPG2 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- HtrA3 antigen affinity purified polyclonal antibody (Catalog # ABO10318) at 0.5 μ g/mL overnight at 4 °C, then washed with TBS-0.1%Tween 3

times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for HtrA3 at approximately 49KD. The expected band size for HtrA3 is at 49KD.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.