

## **Anti-HtrA3 Picoband Antibody**

**Catalog # ABO10318** 

# **Specification**

# **Anti-HtrA3 Picoband Antibody - Product Information**

Application WB
Primary Accession P83110
Host 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.

### **Anti-HtrA3 Picoband Antibody - 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 MW KDa

# **Application Details**

Western blot, 0.1-0.5 μg/ml, Human<br>

## **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.

### **Protein Name**

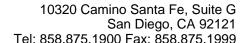
Serine protease HTRA3

#### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

# **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 r°Constitution, 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.

# **Anti-HtrA3 Picoband Antibody - 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:<a href="http://www.uniprot.org/citations/21321049" target="\_blank">21321049</a>, PubMed:<a href="http://www.uniprot.org/citations/22229724" target="\_blank">222229724</a>).

#### **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

# **Anti-HtrA3 Picoband Antibody - 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

### **Anti-HtrA3 Picoband Antibody - 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  $\hat{l}^{1}$ /4g/mL overnight at 4 $\hat{A}$ °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.

## Anti-HtrA3 Picoband Antibody - 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.