

Product datasheet for **TP322362**

HTRA1 (NM_002775) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human HtrA serine peptidase 1 (HTRA1), 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>Peptide sequence encoded by RC222362 Blue=ORF Red=Cloning site Green=Tag(s)

MQIPRAALLPLLLLLLAAPASAQLSRAGRSAPLAAGCPDRCEPARCPPQPEHCEGGRARDACGCCEVCG
APEGAACGLQEGPCGEGLCVVPFGVPASATVRRRAQAGLCVCASSEPVCGSDANTYANLCQLRAASRR
SERLHRPPVIVLQRGACGQGQEDPNSLRHKYFNFIADVVEKIAPAWHIELFRKLPFSKREVPVAVSGSGF
IVSEDGLIVTNAHVVTNKHRVKVELKNGATYEAKIKDVDEKADIALIKIDHQGKLPVLLLGRSSELRPG
EFVAIGSPFSLQNTVTTGIVSTTQRGGKELGLRNSDMDYIQTDAIINYGNSSGGLVNLGDGEVIGINTL
KVTAISFAIPSDKIKKFLTESHDRQAKGKAITKKKYIGIRMMSLTSSKAKELKDRHRDFPDVISGAYI
IEVIPDTPAEAGGLKENDVIISINGQSVVSANDVSDVIKRESTLNMVRRGNEDIMITVIPEEIDP

Recombinant protein using RC222362 also available, [TP322362](#)

Tag:	C-Myc/DDK
Predicted MW:	49 kDa
Concentration:	>0.1 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Bioactivity:	Protein degradation enzyme (PMID: 29269042) Enzyme activity (PMID: 29572155)
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.



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Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: [NP_002766](#)

Locus ID: 5654

UniProt ID: [Q92743](#)

RefSeq Size: 2133

Cytogenetics: 10q26.13

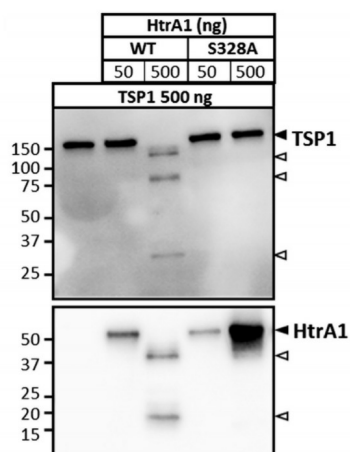
RefSeq ORF: 1440

Synonyms: ARMD7; CADASIL2; CARASIL; HtrA; L56; ORF480; PRSS11

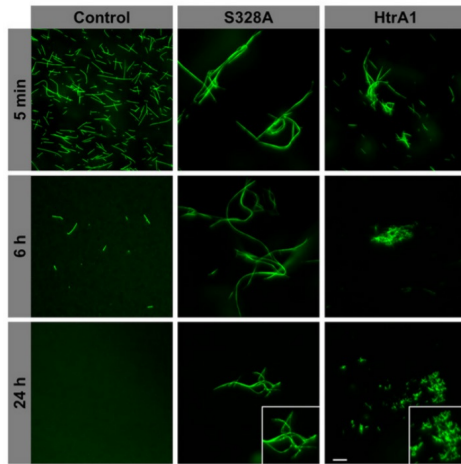
Summary: This gene encodes a member of the trypsin family of serine proteases. This protein is a secreted enzyme that is proposed to regulate the availability of insulin-like growth factors (IGFs) by cleaving IGF-binding proteins. It has also been suggested to be a regulator of cell growth. Variations in the promoter region of this gene are the cause of susceptibility to age-related macular degeneration type 7. [provided by RefSeq, Jul 2008]

Protein Families: Druggable Genome, Protease, Secreted Protein

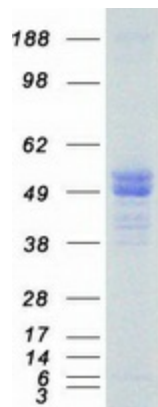
Product images:



An in vitro cleavage assay shows TSP1 is a direct substrate of HtrA1. TSP1 (500 ng) were incubated with the indicated amount of active HtrA1WT (WT) (OriGene TP322362) or inactive HtrA1S328A (S328A) (OriGene [TP700208]). The cleavage events were analyzed by immunoblotting. The filled triangle is the full-length form of TSP1 and HtrA1. The empty triangle is proteolysis products. TSP1 was probed using an antibody specific to the N-terminal domain. The molecular weight (kDa) reference is indicated in the left side of the image. Figure cited from Matrix Biol, PMID: 29572155



HtrA1 degrades preformed microtubules and avoids polymerization in vitro. Fluorescently labeled microtubules were polymerized in vitro and incubated with S328A HtrA1 (OriGene, [TP700208]) (center) and HtrA1 (OriGene, TP322362) (right). Images were acquired at 5 minutes, 6 hours, and 24 hours after adding HtrA1. Scale bar, 10 μ m. Figure cited from EBioMedicine, PMID: 29269042



Coomassie blue staining of purified HTRA1 protein (Cat# TP322362). The protein was produced from HEK293T cells transfected with HTRA1 cDNA clone (Cat# [RC222362]) using MegaTran 2.0 (Cat# [TT210002]).