

Product datasheet for **TP720344M**

Cathepsin S (CTSS) (NM_004079) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human cathepsin S (CTSS)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	Gln17-Ile331
Tag:	C-His
Predicted MW:	36.9 kDa
Concentration:	lot specific
Purity:	>95% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	Supplied as a 0.2 um filtered solution of 20mM MES, 150mM NaCl, 10% Glycerol, pH 5.5.
Endotoxin:	< 0.1 EU per µg protein as determined by LAL test
Storage:	Store at < -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.
Stability:	Stable for at least 3 months from date of receipt under proper storage and handling conditions.
RefSeq:	<u>NP_004070</u>
Locus ID:	1520
UniProt ID:	<u>P25774</u>
Cytogenetics:	1q21.3


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Summary:

The preproprotein encoded by this gene, a member of the peptidase C1 family, is a lysosomal cysteine proteinase that participates in the degradation of antigenic proteins to peptides for presentation on MHC class II molecules. The mature protein cleaves the invariant chain of MHC class II molecules in endolysosomal compartments and enables the formation of antigen-MHC class II complexes and the proper display of extracellular antigenic peptides by MHC-II. The mature protein also functions as an elastase over a broad pH range. When secreted from cells, this protein can remodel components of the extracellular matrix such as elastin, collagen, and fibronectin. This gene is implicated in the pathology of many inflammatory and autoimmune diseases and, given its elastase activity, plays a significant role in some pulmonary diseases. Alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, May 2020]

Protein Families:

Druggable Genome, Protease

Protein Pathways:

Antigen processing and presentation, Lysosome