

#### Bioactive

# CTSF (Human) Recombinant Protein

Catalog # P8108 Size 100 ug

# Applications



Specification	
Product Description	Human CTSF (Q9UBX1, 20 a.a 484 a.a.) partial length recombinant protein His tag expressed in Baculovirus expression system.
Sequence	APAQPRAASFQAWGPPSPELLAPTRFALEMFNRGRAAGTRAVLGLVRGRVRRAGQGSLYSLEA TLEEPPCNDPMVCRLPVSKKTLLCSFQVLDELGRHVLLRKDCGPVDTKVPGAGEPKSAFTQGS AMISSLSQNHPDNRNETFSSVISLLNEDPLSQDLPVKMASIFKNFVITYNRTYESKEEARWRLSVFV NNMVRAQKIQALDRGTAQYGVTKFSDLTEEEFRTIYLNTLLRKEPGNKMKQAKSVGDLAPPEWD WRSKGAVTKVKDQGMCGSCWAFSVTGNVEGQWFLNQGTLLSLSEQELLDCDKMDKACMGGL PSNAYSAIKNLGGLETEDDYSYQGHMQSCNFSAEKAKVYINDSVELSQNEQKLAAWLAKRGPISV AINAFGMQFYRHGISRPLRPLCSPWLIDHAVLLVGYGNRSDVPFWAIKNSWGTDWGEKGYYYLHR GSGACGVNTMASSAVVD
Host	Viruses
Theoretical MW (kDa)	52.5
Form	Liquid
Preparation Method	Baculovirus expression system
Purity	> 90% by SDS-PAGE
Endotoxin Level	< 1 EU per 1 ug of protein (determined by LAL method)

😭 Abnova	Product Information
Activity	Specific activity is > 5 pmol/min/ug, and is defined as the amount of enzyme that hydrolyze 1pmole of Z-Phe-Arg-AMC to Z-Phe-Arg and AMC per minute at pH 5.0 at 37°C.
Quality Control Testing	3 ug by SDS-PAGE under reducing condition and visualized by Coomassie blue stain.
Storage Buffer	In Phosphate-Buffer Saline pH 7.4 (40% glycerol)
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.

# Applications

- Functional Study
- SDS-PAGE

### Gene Info — CTSF

Entrez GenelD	8722
Protein Accession#	<u>Q9UBX1</u>
Gene Name	CTSF
Gene Alias	CATSF
Gene Description	cathepsin F
Omim ID	<u>603539</u>
Gene Ontology	Hyperlink
Gene Summary	Cathepsins are papain family cysteine proteinases that represent a major component of the lysos omal proteolytic system. Cathepsins generally contain a signal sequence, followed by a propeptid e and then a catalytically active mature region. The very long (251 amino acid residues) proregion of the cathepsin F precursor contains a C-terminal domain similar to the pro-segment of cathepsi n L-like enzymes, a 50-residue flexible linker peptide, and an N-terminal domain predicted to ado pt a cystatin-like fold. The cathepsin F proregion is unique within the papain family cysteine protea ses in that it contains this additional N-terminal segment predicted to share structural similarities with cysteine protease inhibitors of the cystatin superfamily. This cystatin-like domain contains so me of the elements known to be important for inhibitory activity. CTSF encodes a predicted protei n of 484 amino acids which contains a 19 residue signal peptide. Cathepsin F contains five poten tial N-glycosylation sites, and it may be targeted to the endosomal/lysosomal compartment via the mannose 6-phosphate receptor pathway. The cathepsin F gene is ubiquitously expressed, and it maps to chromosome 11q13, close to the gene encoding cathepsin W. [provided by RefSeq



**Other Designations** 

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#### Pathway

• Lysosome

#### Disease

- <u>Cardiovascular Diseases</u>
- Diabetes Mellitus
- Edema