

Product datasheet for RC204047L3

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Cathepsin F (CTSF) (NM_003793) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Cathepsin F (CTSF) (NM_003793) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Cathepsin F

Synonyms: CATSF; CLN13

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC204047).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_003793

ORF Size: 1452 bp





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OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 003793.3</u>

RefSeq Size:2032 bpRefSeq ORF:1455 bpLocus ID:8722

UniProt ID: Q9UBX1

Cytogenetics: 11q13.2

Domains: Pept C1

Protein Families: Druggable Genome, Protease

Protein Pathways: Lysosome MW: 53.2 kDa





Gene Summary:

Cathepsins are papain family cysteine proteinases that represent a major component of the lysosomal proteolytic system. Cathepsins generally contain a signal sequence, followed by a propeptide 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 cathepsin L-like enzymes, a 50-residue flexible linker peptide, and an N-terminal domain predicted to adopt a cystatin-like fold. The cathepsin F proregion is unique within the papain family cysteine proteases 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 some of the elements known to be important for inhibitory activity. CTSF encodes a predicted protein of 484 amino acids which contains a 19 residue signal peptide. Cathepsin F contains five potential 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, Jul 2008]