

Product datasheet for **SC118936**

Cathepsin D (CTSD) (NM_001909) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cathepsin D (CTSD) (NM_001909) Human Untagged Clone
Tag:	Tag Free
Symbol:	Cathepsin D
Synonyms:	CLN10; CPSD; HEL-S-130P
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene sequence for NM_001909 edited
GAATTCGGCACGAGGCCGGCTATAAGCGCACGGCCTCGGGCACCCTCTCCGACCCGGCCG
CCGCCGCCATGCAGCCCTCCAGCCTTCTGCCGCTCGCCCTCTGCCTGCTGGCTGCACCCG
CCTCCGCGCTCGTCAGGATCCCCTGCACAAGTTCACGTCCATCCGCCGGACCATGTCCG
AGGTTGGGGCTCTGTGGAGGACCTGATTGCCAAAGGCCCGTCTCAAAGTACTCCAGG
CGGTGCCAGCCGTGACCGAGGGGCCATTCCCGAGGTGCTCAAGAATACATGGACGCC
AGTACTACGGGGAGATTGGCATCGGGACGCCCCCAGTGCTTACAGTGTCTTCGACA
CGGGCTCCTCAACCTGTGGGTCCCTCCATCCACTGCAAATGCTGGACATCGCTTGCT
GGATCCACCACAAGTACAACAGCGACAAGTCCAGCACCTACGTGAAGAATGGTACCTCGT
TTGACATCCACTATGGCTCGGGCAGCCTCTCCGGGTACCTGAGCCAGGACACTGTGTCCG
TGCCCTGCCAGTCAGCGTCGTCAGCCTCTGCCCTGGGCGGTGTCAAAGTGGAGAGGCAGG
TCTTTGGGGAGGCCACCAAGCAGCCAGGCATCACCTTCATCGCAGCCAAGTTCGATGGCA
TCCTGGGCATGGCTACCCCGCATCTCCGTCAACAACGTGCTGCCCGTCTTCGACAACC
TGATGCAGCAGAAGCTGGTGGACCAGAACATCTTCTCCTTCTACCTGAGCAGGGACCCAG
ATGCCGAGCCTGGGGGTGAGCTGATGCTGGGTGGCACAGACTCCAAGTATTACAAGGGTT
CTCTGTCTACCTGAATGTCACCCGCAAGGCCTACTGGCAGGTCCACCTGGACCAGGTGG
AGGTGGCCAGCGGGCTGACCCTGTGCAAGGAGGGCTGTGAGGCCATTGTGGACACAGGCA
CTTCCCTCATGGTGGGCCGGTGGATGAGGTGCGCGAGCTGCAGAAGGCCATCGGGGCCG
TGCCGCTGATTACGGGCGAGTACATGATCCCCTGTGAGAAGGTGTCCACCCTGCCCGCGA
TCACACTGAAGCTGGGAGGCAAAGGCTACAAGCTGTCCCAGAGGACTACACGCTCAAGG
TGTCGCAGGCCGGGAAGACCCTCTGCCCTGAGCGGCTTCATGGGCATGGACATCCCGCCAC
CCAGCGGGCCACTCTGGATCCTGGGCGACGTCTTCATCGGCCGCTACTACACTGTGTTTG
ACCGTGACAACAACAGGGTGGGCTTCGCCGAGGCTGCCCGCCTTAGTTCCCAAGGCGTC
CGCGCGCCAGCACAGAAACAGAGGAGAGTCCCAGAGCAGGAGGCCCTGGCCAGCGGCC
CCTCCACACACACCCACACACTCGCCCGCCACTGTCCTGGGCGCCCTGGAAGCCGGCG
GCCAAGCCCGACTTGCTGTTTTGTTCTGTGGTTTTCCCTCCCTGGGTTCAGAAATGCT
GCCTGCCTGTCTGTCTCTCCATCTGTTTGGTGGGGGTAGAGCTGATCCAGAGCACAGATC
TGTTTCGTGCATTGGAAGACCCACCCAAGCTTGGCAGCCGAGCTCGTGTATCCTGGGGC
TCCCTTCATCTCCAGGGAGTCCCCTCCCGGCCCTACCAGCGCCCGCTGGGCTGAGCCCC
TACCCACACCAGGCCGTCTCCCGGCCCTCCCTTGAAACCTGCCCTGCCTGAGGGCC
CCTCTGCCAGCTTGGGCCAGCTGGGCTCTGCCACCCTACCTGTTTCAGTGTCCCGGGCC
CGTTGAGGATGAGGCCGCTAGAGGCCTGAGGATGAGCTGGAAGGAGTGAGAGGGGACAAA
ACCCACCTTGTGGAGCCTGCAGGGTGGTGTGGGACTGAGCCAGTCCCAGGGGCATGTA
TTGGCCTGGAGGTGGGGTGGGATTGGGGGCTGGTGCCAGCCTTCTCTGCAGCTGACCT
CTGTTGCTCCTCCCTTGGGCGGCTGAGAGCCCCAGCTGACATGAAATACAGTTGTTGGC
CTCCGGCCTCCCCTCAAAAAAAAAAAAAAAAAAACTCGAC
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001909 unedited
 NGGTTCAAATTTGTATACGACTCCTATAGGCGGCCCGCAATTCGCACGAGGCCGGCTAT
 AAGCGCACGGCCTCGGCGACCCTCTCCGACCCGGCCGCCGCCATGCAGCCCTCCAGC
 CTTCTGCCGCTCGCCCTCTGCCTGCTGGCTGCACCCGCTCCGCGCTCGTCAGGATCCCG
 CTGCACAAAGTTCACGTCCATCCGCCGACCATGTCGGAGGTTGGGGCTCTGTGGAGGAC
 CTGATTGCCAAAGGCCCGTCTCAAAGTACTCCAGGCGGTGCCAGCCGTGACCGAGGGG
 CCCATCCCGAGGTGCTCAAGAACTACATGGACGCCAGTACTACGGGGAGATTGGCATC
 GGGACGCCCCCAGTGCTTACAGTCGTCTTCGACACGGGCTCCTCAAACCTGTGGGTC
 CCCTCCATCCACTGCAAACCTGCTGGACATCGTTGCTGGATCCACCACAAGTACAACAGC
 GACAAGTCCAGCACCTACGTGAAGAATGGTACCTCGTTTGACATCCACTATGGCTCGGGC
 AGCCTCTCCGGTACCTGAGCCAGGACTGTGTCGGTGCCTGCCAGTCAGCGTCGTCA
 GCCTCTGCCCTGNGCGGTGTCAAAGTGGAGAGGACAGGTTTGGGGAGGCCACCAAGCAG
 CCAGGCATCACCTTCATCGCAGCAAGTTCGATGGCATCCTGGGCATGGCCTACCCCCGC
 ATCTCCGTCAACAACGTGCTGCCGTCTTCGACAACCTGATGCAGCAGAAGCTGGTGGAC
 CAGAACATCTTCTCTTCTACCTGAGCAGNACCAGATGCGCAGCCTGGNGGGTGAAGCT
 GATGCCTGGTGGACAGACTCCAAGATTACAGGGTTTCTGTCTACCTGAATGTACCC
 CGCAGGCTACTGGC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_001909 unedited
 ACCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTGGAGGGGAGGCCGNGAGC
 CAACAACGTATTTCCATGTCAGCTGGGCTCTCAGCCGCCAAGGGGAGGACAACAGAG
 GTCAGCTGCAGAGGAAGGCTGGCACCAGCCCCAATCCCAACCCACCTCCAGGCCAATA
 CATGCCCTGGGACTGGCTCAGTCCCAGCACACCCTGCAGGCTCCAACAAGGTGGGTTT
 TGTCCTCTCACTCCTTCCAGCTCATCCTCAGGCCTTAGCGGCCTCATCCTCAACGGG
 CCCGGGACACTGAACAGGTAGGGTGGCAGAGCCAGCTGGGCCAAGCTGGGCAGAGGGG
 CCCTCAGGCAGGGCAGGTTTCCAAGGGAGGGCCCGGGAGGACGGCCTGGTGTGGGTTAGG
 GGCTCAGCCCAGCGGGCCTGGTAGGGCCGGGAGGGGACTCCCTGGAGATGAAGGGAGC
 CCCAGGATACACGAGCTCGGCTGCCAAGCTTGGTGGGGTCTTCCAATGCACGAAACAGA
 TCTGTGCTCTGGATCAGCTTACCCCCACCAACAGATGGAGAGACAGACAGGCAGGCAG
 CATTCTGAACCCAGGGAGGGGAAAACCAAGACAGAAACAGCAAGTCCGGCTTGGGCCG
 CCGGCTTCCAGGGCGCCANNACAGTGGGCGGGCAANTGTGTGGGTGTGTGTGGGAGGGG
 CCCCCTGGCCAGGGCCTCCTGCTCTGGGACTCTNCTCTGTTTCTGTGCTGGCGCGCGGA
 CGCCTTGGGACTAGAGGGCGGCANCTCCGCGAAGCCACCTGTTGGTGTACGGGTCAACA
 CGTGTATTAGCGGCGATGAAAACCTCCCCCAGATCCAAATGGCCCCGGGTTGCGGGATG
 TCATGCCATGAACCGCTCAGCAAAGGTCTTCCCN

Restriction Sites:

NotI-NotI

ACCN:

NM_001909

Insert Size:

2190 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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:	<ol style="list-style-type: none">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:	NM_001909.3 , NP_001900.1
RefSeq Size:	2205 bp
RefSeq ORF:	1239 bp
Locus ID:	1509
UniProt ID:	P07339
Cytogenetics:	11p15.5
Domains:	asp
Protein Families:	Druggable Genome, Protease
Protein Pathways:	Lysosome
Gene Summary:	<p>This gene encodes a member of the A1 family of peptidases. The encoded preproprotein is proteolytically processed to generate multiple protein products. These products include the cathepsin D light and heavy chains, which heterodimerize to form the mature enzyme. This enzyme exhibits pepsin-like activity and plays a role in protein turnover and in the proteolytic activation of hormones and growth factors. Mutations in this gene play a causal role in neuronal ceroid lipofuscinosis-10 and may be involved in the pathogenesis of several other diseases, including breast cancer and possibly Alzheimer's disease. [provided by RefSeq, Nov 2015]</p>