

Product datasheet for RC200719

Cathepsin D (CTSD) (NM_001909) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cathepsin D (CTSD) (NM_001909) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cathepsin D
Synonyms:	CLN10; CPSD; HEL-S-130P
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200719 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGCCCTCCAGCCTTCTGCCGCTCGCCCTCTGCCTGCTGGCTGCACCCGCCTCCGCGCTCGTCAGGA
TCCCGTGCACAAGTTCACGTCCATCCGCCGACCATGTCGGAGGTTGGGGGCTCTGTGGAGGACCTGAT
TGCCAAAGGCCCGTCTCAAAGTACTCCAGGCGGTGCCAGCCGTGACCGAGGGGCCATTCCCGAGGTG
CTCAAGAACTACATGGACGCCAGTACTACGGGGAGATTGGCATCGGGACGCCCCCAGTGCTTACAG
TCGTCTTCGACACGGGCTCCTCAACCTGTGGTCCCCTCCATCCACTGCAAAGTCTGGACATCGCTTG
CTGGATCCACCACAAGTACAACAGCGACAAGTCCAGCACCTACGTGAAGAATGGTACCTCGTTTGACATC
CACTATGGCTCGGGCAGCCTCTCCGGGTACCTGAGCCAGGACACTGTGTGGTGGCCCTGCCAGTCAGCGT
CGTCAGCCTCTGCCCTGGGCGGTGTCAAAGTGGAGAGGAGGTCTTTGGGGAGGCCACCAAGCAGCCAGG
CATCACCTTATCGCAGCCAAGTTTCATGGCATCCTGGGCATGGCCTACCCCGCATCTCCGTCAACAAC
GTGCTGCCCGTCTTCGACAACCTGATGCAGCAGAAGCTGGTGGACCAGAACATCTTCTCCTTCTACCTGA
GCAGGGACCCAGATGCGCAGCCTGGGGGTGAGCTGATGCTGGTGGCACAGACTCCAAGTATTACAAGGG
TTCTCTGTCTACCTGAATGTCAACCGCAAGGCCACTGGCAGGTCCACCTGGACCAGGTGGAGGTGGCC
AGCGGGCTGACCCTGTGCAAGGAGGGCTGTGAGGCCATTGTGGACACAGGCACTCCCTCATGGTGGGCC
CGGTGGATGAGGTGCGCGAGCTGCAGAAGGCCATCGGGGCGTGGCGCTGATTCAGGGCGAGTACATGAT
CCCCTGTGAGAAGGTGTCCACCCTGCCCGCATCACACTGAAGCTGGGAGGCAAAGGCTACAAGCTGTCC
CCAGAGGACTACAGCTCAAGGTGTGCGAGGCCGGGAAGACCCTCTGCCTGAGCGGCTTTCATGGGCATGG
ACATCCCGCCACCCAGCGGGCCACTCTGGATCCTGGGCGACGTCTTCATCGGCCGCTACTACACTGTGTT
TGACCGTGACAACAACAGGGTGGGCTTCGCCGAGGCTGCCCGCCTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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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: [NM_001909.5](#)

RefSeq Size: 2141 bp

RefSeq ORF: 1239 bp

Locus ID: 1509

UniProt ID: [P07339](#)

Cytogenetics: 11p15.5

Domains: asp

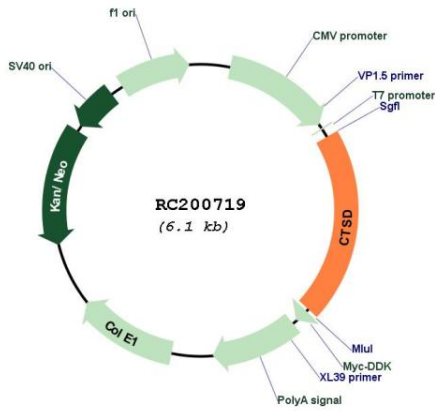
Protein Families: Druggable Genome, Protease

Protein Pathways: Lysosome

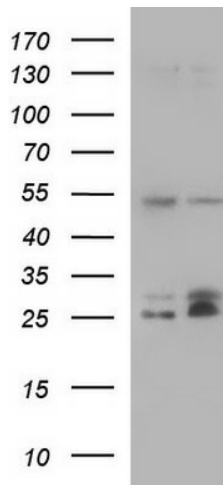
MW: 44.6 kDa

Gene Summary: 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]

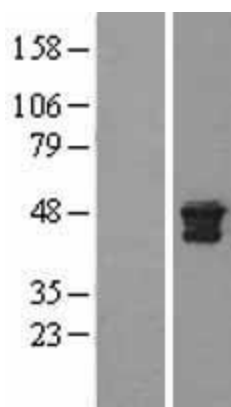
Product images:



Circular map for RC200719



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CTSD (Cat# RC200719, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CTSD (Cat# [TA590104]). Positive lysates [LY400712] (100ug) and [LC400712] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400712]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200719 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).