

## Product datasheet for **RC211478**

### Cellular Apoptosis Susceptibility (CSE1L) (NM\_001316) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cellular Apoptosis Susceptibility (CSE1L) (NM_001316) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cellular Apoptosis Susceptibility
Synonyms:	CAS; CSE1; XPO2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>RC211478 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGAAGCTCAGCGATGCAAACTGCAAACTAACAGAATATTTAAAGAAAACACTTGATCCTGATCCTG  
CCATCCGACGTCCAGCTGAGAAATTTCTTGAATCTGTTGAAGGAAATCAGAATTATCCACTGTTGCTTTT  
GACATTACTGGAGAAGTCCCAGGATAATGTTATCAAAGTATGTGCTTCAGTAACATTCAAAAACTATATT  
AAAAGGAACTGGAGAATTGTTGAAGATGAACCAACAAAATTTGTGAAGCCGATCGAGTGGCCATTAAGG  
CCAACATAGTGCCTTGATGCTTAGCAGCCAGAGCAAATTCAGAAGCAGTTAAGTGATGCAATTAGCAT  
TATTGGCAGAGAAGATTTCCACAGAAATGGCCTGACTTGCTGACAGAAATGGTGAATCGCTTTCAGAGT  
GGAGATTTCCATGTTATTAATGGAGTCTCCGTACAGCACATTCATTATTTAAAAGATACCGTCATGAAT  
TTAAGTCAAACGAGTTATGGACTGAAATTAAGCTTGTCTGGATGCCTTTGCTTTGCCTTTGACTAATCT  
TTTTAAGGCCACTATTGAACTCTGCAGTACCCATGCAAAATGATGCCTCTGCCCTGAGGATCTGTTTTCT  
TCCTGATCCTGATCTCAAAATGTTCTATAGTTTAACTTTTCAGGATCTCCCTGAATTTTTTGAAGATA  
ATATGGAACTGGATGAATAATTTTCATACTCTTAACTTGGATAATAAGCTTTTACAACTGATGA  
TGAAGAGGAAGCCGGCTTATTGGAGCTCTTAAATCCCAGATTTGTGATAATGCCGCACTCTATGCACAA  
AAGTACGATGAAGAATCCAGCGATACCTGCCTCGTTTTGTTACAGCCATCTGGAATTTACTAGTTACAA  
CGGGTCAAGAGGTTAAATATGATTTGTTGGTAAGTAATGCAATTCATTTCTGGCTTCAGTTTGTGAGAG  
ACCTCATTATAAGAATCTATTTGAGGACCAGAACCGCTGACAAGTATCTGTGAAAAGGTTATTGTGCCT  
AACATGGAATTTAGAGCTGCTGATGAAGAAGCATTGAAGATAATTCTGAGGAGTACATAAGGAGAGATT  
TGAAGGATCTGATATTGATAGTACAGCAGGGCTGCTTGTGATCTGGTACGAGGATTATGCAAGTTTTT  
TGAGGGACCTGTGACAGGAATCTTCTCTGGTTATGTTAATTCCATGCTGCAGGAATACGCAAAAAATCCA  
TCTGTCAACTGGAACACAAAGATGCAGCCATCTACCTAGTGACATCTTTGGCATCAAAAGCCCAACAC  
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AAGAAGCCATAATCCCCTACATCCCTACTCTCATCACTCAGCTTACACAGAAGCTATTAGCTGTTAGTAA  
GAACCAAGCAAACCTCACTTAACTACTACATGTTTGAAGCAATATGTTTATCCATAAGAATAACTTGC  
AAAGCTAACCTGCTGCTGTTGTAAATTTTGGAGGGCTTTGTTTTTGGTGTACTGAAATCTTACAAA  
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ATCTGTGCGGTTGGCATAACCAATTAACAGAATGTCCCAATGATGGACTGAGTATACCAAAAC  
TGTGGACTCCATTATTACAGTCTTTGATTGGTCTTTTGGATTACCCGAAGATGATACCATTCTGATGA  
GGAACATTTTATTGACATAGAAGATACACCAGGATATCAGACTGCCTTCTCACAGTTGGCATTGCTGGG  
AAAAAAGAGCATGATCCTGTAGGTCAAATGGTGAATAACCCAAAATTCACCTGGCACAGTCACTTACA  
AGTTGTCTACCGCTGTCCAGGAAGGTTCCATCAATGGTGAAGCACCAGCCTGAATGCAGAAGCGCTCCA  
GTATCTCCAAGGTACCTTCAGGCAGCCAGTGTGACACTGCTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC211478 protein sequence  
 Red=Cloning site Green=Tags(s)

MELSDANLQTLTEYLKKTLDPPAIRRPAEKFLVESVEGNQNYPLLLLTLLEKSQDNVIKVCASVTFKNYI  
 KRNWRIVEDEPNKICEADRVAIKANIVHMLSSPEIQKQLSDAISIIIGREDFPQKWPDLLTEMVNRFS  
 GDFHVINGVLRTAHSLFKRYRHEFKSNELWTEIKLVDAFALPLTNLFKATIELCSTHANDASALRILFS  
 SLILISKLFYSLNFQDLPEFFEDNMETWMNMFHTLLTLDNKLLQTDDEEEAGLLELLKSQICDAAALYAQ  
 KYDEEFQRYLPRFVTAIWNLLVTTGQEVKYDLLVSNAIQFLASVCERPHYKNLFEDQNTLTSICEKVIVP  
 NMEFRAADEEAFEDNSEEYIRRDLGSDIDTRRRAACDLVRGLCKFFEGPVTGIFSGYVNSMLQEYAKNP  
 SVNWKHKDAAIYLVTSLASKAQTQKHGITQANELVNLTEFFVNHILPDLKSANVNEFPVLKADGIKYYIMI  
 FRNQVPKEHLLVSIPLLINHLQAESIVVHTYAAHALERLFTMRGPNNATLFTAEEIAPFVEILLTNLFKA  
 LTLPGSSENEYIMKAIMRSFSLQEAIIPIYIPTLITQLTQKLLAVSKNPSKPHFNHYMFEAICLSIRITC  
 KANPAAVVNFEEALFLVFTEILQNDVQEFIPYVFQVMSLLLETHKNDIPSSYMALFPHLLQPVLWERTGN  
 IPALVRLQLAFLERGSNTIASAAADKIPGLLGVFQKLIASKANDHQGFYLLNSIIEHMPPEVDQYRKQI  
 FILLFQRLQNSKTTKFKSFLVFINLYCIKYGALALQEIFDGIQPKMFGMVLEKIIPEIQKVSNGVEKK  
 ICAVGITKLLTECPPMMDTEYTKLWTPLLQSLIGLFELPEDDTIPDEEHFIDIEDTPGYQTAFLSQAFAFAG  
 KKEHDPVGMVNNPKIHLAQLSHKLSTACPRVPSMVSTSLNAEALQYLQGYLQAASVTLL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6561\\_h12.zip](https://cdn.origene.com/chromatograms/mk6561_h12.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



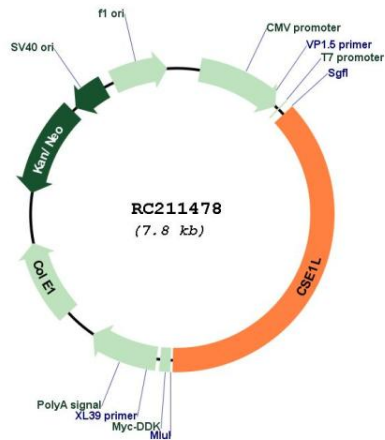
\* The last codon before the Stop codon of the ORF

ACCN: NM\_001316

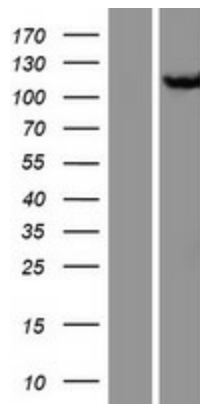
ORF Size: 2913 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001316.4</a>
<b>RefSeq Size:</b>	3627 bp
<b>RefSeq ORF:</b>	2916 bp
<b>Locus ID:</b>	1434
<b>UniProt ID:</b>	<a href="#">P55060</a>
<b>Cytogenetics:</b>	20q13.13
<b>Domains:</b>	IBN_NT, CAS_CSE1
<b>Protein Families:</b>	Druggable Genome
<b>MW:</b>	110.4 kDa
<b>Gene Summary:</b>	Proteins that carry a nuclear localization signal (NLS) are transported into the nucleus by the importin-alpha/beta heterodimer. Importin-alpha binds the NLS, while importin-beta mediates translocation through the nuclear pore complex. After translocation, RanGTP binds importin-beta and displaces importin-alpha. Importin-alpha must then be returned to the cytoplasm, leaving the NLS protein behind. The protein encoded by this gene binds strongly to NLS-free importin-alpha, and this binding is released in the cytoplasm by the combined action of RANBP1 and RANGAP1. In addition, the encoded protein may play a role both in apoptosis and in cell proliferation. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jan 2012]

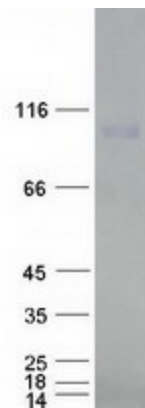
Product images:



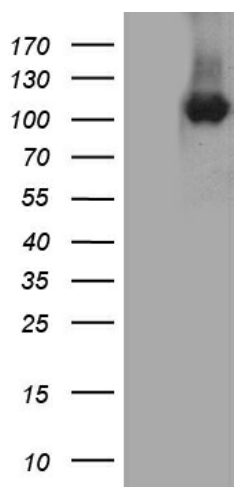
Circular map for RC211478



Western blot validation of overexpression lysate (Cat# [LY420011]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211478 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CSE1L protein (Cat# [TP311478]). The protein was produced from HEK293T cells transfected with CSE1L cDNA clone (Cat# RC211478) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CSE1L (Cat# RC211478, 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-CSE1L (Cat# [TA812195]). Positive lysates [LY420011] (100ug) and [LC420011] (20ug) can be purchased separately from OriGene.