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Product datasheet for RC232454

Caspase 2 (CASP2) (NM_001224) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Caspase 2 (CASP2) (NM_001224) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CASP2
Synonyms:	CASP-2; ICH1; NEDD-2; NEDD2; PPP1R57
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC232454 representing NM_001224 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGCATCCTCATCATCAGGAAACTCTAAAAAAGAACCGAGTGGTGCTAGCCAAACAGCTGTTGTTGAGCG AATTGTTAGAACATCTTCTGGAGAAGGACATCATCACCTTGGAAATGAGGGAGCTCATCCAGGCCAAAGT GGGCAGTTTCAGCCAGAATGTGGAACTCCTCAACTTGCTGCCTAAGAGGGGTCCCCAAGCTTTTGATGCC TTCTGTGAAGCACTGAGGGAGACCAAGCAAGGCCACCTGGAGGATATGTTGCTCACCACCCTTTCTGGGC TTCAGCATGTACTCCCACCGTTGAGCTGTGACTACGACTTGAGTCTCCCTTTTCCGGTGTGTGAGTCCTG TCCCCTTTACAAGAAGCTCCGCCTGTCGACAGATACTGTGGAACACTCCCTAGACAATAAAGATGGTCCT GTCTGCCTTCAGGTGAAGCCTTGCACTCCTGAATTTTATCAAACACACTTCCAGCTGGCATATAGGTTGC AGTCTCGGCCTCGTGGCCTAGCACTGGTGTTGAGCAATGTGCACTTCACTGGAGAGAAAGAACTGGAATT TCGCTCTGGAGGGGATGTGGACCACAGTACTCTAGTCACCCTCTTCAAGCTTTTGGGCTATGACGTCCAT GTTCTATGTGACCAGACTGCACAGGAAATGCAAGAGAAACTGCAGAATTTTGCACAGTTACCTGCACACC GAGTCACGGACTCCTGCATCGTGGCACTCCTCTCGCATGGTGTGGAGGGCGCCATCTATGGTGTGGATGG GAAACTGCTCCAGCTCCAAGAGGTTTTTCAGCTCTTTGACAACGCCAACTGCCCAAGCCTACAGAACAAA CCAAAAATGTTCTTCATCCAGGCCTGCCGTGGAGGTGCTATTGGATCCCTTGGGCACCTCCTTCTGTTCA CTGCTGCCACCGCCTCTCTTGCTCTA ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

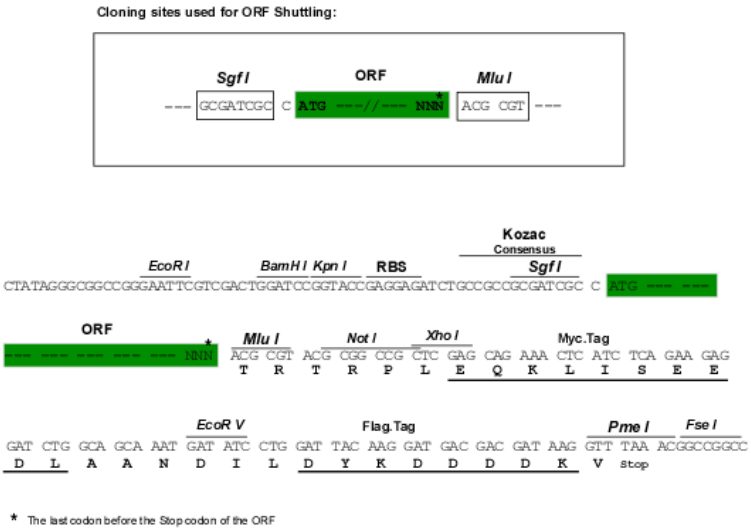
>RC232454 representing NM_001224
Red=Cloning site Green=Tags(s)

MHPHHQETLKKNRVVLAKQLLLSELLEHLLEKDIITLEMRELIQAKVGSFSQNVELLNLLPKRGPQAFDA
FCEALRETKQGHLEDMLLTTLSGLQHVLPPLSCDYDLSLPFPVCESCPLYKKLRLSTDTVEHSLDNKDGP
VCLQVKPCTPEFYQTHFQLAYRLQSRPRGLALVLSNVHFTGEKELEFRSGGDVDHSTLVTLFKLLGYDVH
VLCDQTAQEMQEKLQNFAQLPAHRVTDSCIVALLSHGVEGAIYGVDGKLLQLQEVFQLFDNANCPSLQNK
PKMFFIQACRGGAIGSLGHLLLFTAATASLAL

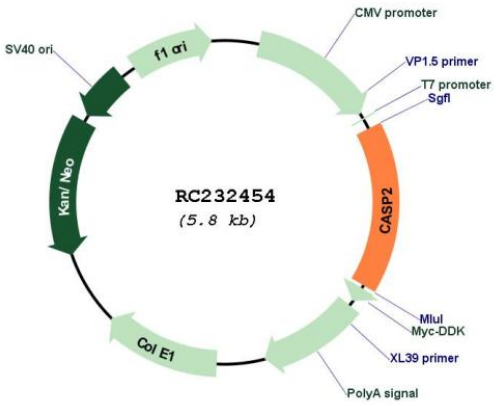
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001224

ORF Size: 936 bp

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:	NM_001224.4, NP_001215.1
RefSeq Size:	4057 bp
RefSeq ORF:	939 bp
Locus ID:	835
UniProt ID:	P42575
Cytogenetics:	7q34
Domains:	CARD, CASc, ICE_p20
Protein Families:	Druggable Genome, Protease
MW:	35.3 kDa
Gene Summary:	This gene encodes a member of the cysteine-aspartic acid protease (caspase) family. Caspases mediate cellular apoptosis through the proteolytic cleavage of specific protein substrates. The encoded protein may function in stress-induced cell death pathways, cell cycle maintenance, and the suppression of tumorigenesis. Increased expression of this gene may play a role in neurodegenerative disorders including Alzheimer's disease, Huntington's disease and temporal lobe epilepsy. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Jan 2011]