

Product datasheet for **RG200669**

Caspase 2 (CASP2) (NM_032982) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Caspase 2 (CASP2) (NM_032982) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Caspase 2
Synonyms:	CASP-2; ICH1; NEDD-2; NEDD2; PPP1R57
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG200669 representing NM_032982
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGCGCCGAGCGCGGGTCTTGGTCCACCTTCCAGCACAAGGAGCTGATGGCCGCTGACAGGGGAC
 GCAGGATATTGGAGTGTGTGGCATGCATCCTCATCATCAGAACTCTAAAAAGAACCGAGTGGTGCT
 AGCCAAACAGCTGTTGTTGAGCGAATTATTAGAACATCTTCTGGAGAAGGACATCATCACCTTGGAAATG
 AGGGAGCTCATCCAGGCCAAAGTGGCAGTTTCAGCCAGAATGTGGAACCTCTCAACTTGTCTGCCTAAGA
 GGGGTCCCAAGCTTTTGTGCTTCTGTGAAGCACTGAGGGAGACCAAGCAAGGCCACCTGGAGGATAT
 GTTGCTCACCACCCTTTTGGGCTTTCAGCATGTACTCCCACCGTTGAGCTGTGACTACGACTTGAGTCTC
 CCTTTCCGGTGTGTGAGTCTGTCCCCTTACAAGAAGCTCCGCTGTGACAGATACTGTGGAACACT
 CCCTAGACAATAAAGATGGTCTCTGTCTTTCAGGTGAAGCCTTGCCTCTGAATTTTATCAAACACA
 CTTCCAGCTGGCATAATAGTTGAGTCTCGGCCTCGTGGCCTAGCACTGGTGTGAGCAATGTGCACCTC
 ACTGGAGAGAAAAGTGAATTTTCGCTCTGGAGGGGATGTGGACCACAGTACTCTAGTACCCTCTTCA
 AGCTTTTGGGCTATGACGTCCATGTTCTATGTGACCAGACTGCACAGGAAATGCAAGAGAAAAGTGCAGAA
 TTTTGCACAGTTACCTGCACACCGAGTACCGACTCCTGCATCGTGGCACTCCTCTCGCATGGTGTGGAG
 GGCGCCATCTATGGTGTGGATGGGAAACTGCTCCAGCTCCAAGAGGTTTTTTCAGCTCTTTGACAACGCCA
 ACTGCCAAGCCTACAGAACAACCAAAAATGTTCTTATCCAGGCCTGCCGTGGAGATGAGACTGATCG
 TGGGGTTGACCAACAAGATGGAAGAACCACGCAGGATCCCCTGGGTGCGAGGAGAGTGTGCCGGTAAA
 GAAAAGTTGCCGAAGATGAGACTGCCACGCGCTCAGACATGATATGCGGCTATGCCTGCCTCAAAGGGA
 CTGCCGCCATGCCGAACCAACGAGGTTCTTGGTACATCGAGGCTCTTGTCAAGTGTTTTCTGAGCG
 GGCTTGTGATATGCACGTGGCCGACATGCTGGTTAAGGTGAACGCACTTATCAAGGATCGGGAAGGTTAT
 GCTCCTGGCACAGAATTCACCGGTGCAAGGAGATGTCTGAATACTGCAGCACTCTGTGCCGCCACCTCT
 ACCTGTTCCAGGACACCTCCACA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG200669 representing NM_032982
 Red=Cloning site Green=Tags(s)

MAAPSAGSWSTFQHKELMAADRGRRIILGVCGMHPHQETLKKNRVVLAKQLLSELLEHLLLEKDIITLEM
 RELIQAKVGSFSQNVLLNLLPKRGPQAFDAFCEALRETKQGHLEDMLLTTL SGLQHVLPPLSCDYDL SL
 PFPVCECPLYKLLRLSTDVEHSLDNKDGPLCLQVKPCTPEFYQTHFQLAYRLQSRPRGLALVLSNVHF
 TGEKELEFRSGGDVDHSTLVTLFKLLGYDVHVLCDQTAQEMQEKLQNFQQLPAHRVTDSCIVALLSHGVE
 GAIYGVGKLLQLQEVFQLFDNANCP SLQNKPKMFFIQACRGDETD RGVDDQDGKNHAGSPGCEESDAGK
 EKLPKMRLPTRSDMICGYACLKGTAA MRNTRKGSWYIEALAQVFSERACDMHVADMLVKVNALIKDREGY
 APGTEFHRCKEMSEYCSLTCRHL YLFPGHPPT

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_032982

ORF Size: 1356 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_032982.2](#), [NP_116764.2](#)

RefSeq Size: 4145 bp

RefSeq ORF: 1359 bp

Locus ID: 835

UniProt ID: [P42575](#)

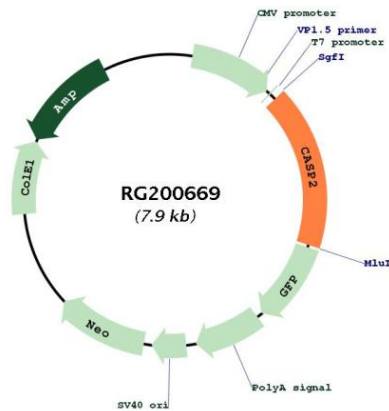
Cytogenetics: 7q34

Domains: CARD, CASc, ICE_p10, ICE_p20

Protein Families: Druggable Genome, Protease

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]

Product images:



Circular map for RG200669