

Product datasheet for **RG232454**

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:	TurboGFP
Symbol:	CASP2
Synonyms:	CASP-2; ICH1; NEDD-2; NEDD2; PPP1R57
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG232454 representing NM_001224 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCATCCTCATCATCAGGAACTCTAAAAAGAACCGAGTGGTCTAGCCAAACAGCTGTTGTTGAGCG
AATTGTTAGAACATCTTCTGGAGAAGGACATCATCACCTTGAAATGAGGGAGCTCATCCAGGCCAAAGT
GGGCAGTTTCAGCCAGAATGTGGAACCTCTCACTTGTGCTAAGAGGGGTCCCAAGCTTTTGATGCC
TTCTGTGAAGCACTGAGGGAGACCAAGCAAGGCCACCTGGAGGATATGTTGCTCACCACCCTTTCTGGC
TTCAGCATGTACTCCACCGTTGAGCTGTGACTACGACTTGAGTCTCCCTTTCCGGTGTGTGAGTCCTG
TCCCTTTACAAGAAGCTCCGCCTGTCGACAGATACTGTGGAACACTCCCTAGACAATAAAGATGGTCTT
GTCTGCCTTCAGGTGAAGCCTTGCACTCCTGAATTTTATCAAACACACTCCAGCTGGCATATAGTTGTC
AGTCTCGGCTCGTGGCCTAGCACTGGTGTGAGCAATGTGCACTTCACTGGAGAGAAAGAACTGGAATT
TCGCTCTGGAGGGGATGTGGACCACGTAAGTCTAGTACCCTCTCAAGCTTTTGGGCTATGACGTCCAT
GTTCTATGTGACCAGACTGCACAGGAAATGCAAGAGAACTGCAGAAATTTGCACAGTTACCTGCACACC
GAGTCACGGACTCCTGCATCGTGGCACTCCTCTCGCATGGTGTGGAGGGCGCCATCTATGGTGTGGATGG
GAAACTGCTCCAGCTCCAAGAGGTTTTTCAGCTCTTTGACAACGCCAACTGCCAAAGCCTACAGAACAAA
CCAAAAATGTTCTTCATCCAGGCCTGCCGTGGAGGTGCTATTGGATCCCTTGGCACCTCCTTCTGTTCA
CTGCTGCCACCGCCTCTTTGCTCTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG232454 representing NM_001224
 Red=Cloning site Green=Tags(s)

MHPHHQETLKKNRVVLAKQLLLSELLEHLLLEKDIITLEMRELIQAKVGSFSSQNVLLNLLPKRGPQAFDA
 FCEALRETKQGHLEDMLLTTL SGLQHVL PPLSCDYDL SLPFPVCE SCPL YKKLR LSTDTVEHSLDNK DGP
 VCLQVKPCTPEFYQTHFQLAYRLQSRPRGLALVLSNVHFTGEKELEFRSGGDVDHSTLVTLFKLLGYDVH
 VLCDQTAQEMQEKLQNF AQLPAHRVTDSCIVALLSHGVEGAIYGV D GKLLQLQEVFQLFDNANCP SLQNK
 PKMFFIQACRGG AIGSLGHLLLF TAATASLAL

TRTRPLE - GFP Tag - V

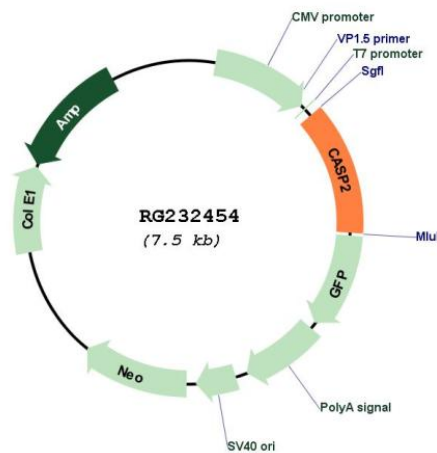
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



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:	<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_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
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]