

Product datasheet for **RC204444**

Caspase 3 (CASP3) (NM_032991) Human Tagged ORF Clone

Product data:

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|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Caspase 3 (CASP3) (NM_032991) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Caspase 3 |
| Synonyms: | CPP32; CPP32B; SCA-1 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >RC204444 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAGAACTGAAAACCTCAGTGGATTCAAATCCATTAATAATTTGGAACCAAAGATCATACATGGAA
GCGAATCAATGGACTCTGGAATATCCCTGGACAACAGTTATAAATGGATTATCCTGAGATGGGTTTATG
TATAATAATTAATAAAGAATTTTCATAAAAGCACTGGAATGACATCTCGGTCTGGTACAGATGTCGAT
GCAGCAAACCTCAGGGAAACATTCAGAACTTGAATATGAAGTCAGGAATAAATGATCTTACACGTG
AAGAAATTGTGGAATTGATGCGTGATGTTCTAAAGAAGATCACAGCAAAGGAGCAGTTTTGTTGTGT
GCTTCTGAGCCATGGTGAAGAAGGAATAATTTTGAACAAATGGACCTGTTGACCTGAAAAAATAACA
AACTTTTTTCAGAGGGGATCGTTGTAGAAGTCTAACTGGAAAACCCAACTTTTCATTATTCAGGCCTGCC
GTGGTACAGAACTGGACTGTGGCATTGAGACAGACAGTGGTGTGATGATGACATGGCGTGCATAAAAT
ACCAGTGGAGGCCGACTTCTGTATGCATACTCCACAGCACCTGGTTATTATTCTTGCGAAATCAAAG
GATGGCTCCTGGTTATCCAGTCGCTTTGTGCCATGCTGAAACAGTATGCCGACAAGCTTGAATTTATGC
ACATTCTACCCGGTTAACCAGAAAGGTGGCAACAGAATTTGAGTCCTTTTCTTTGACGCTACTTTTCA
TGCAAAGAAACAGATTCATGTATTGTTCCATGCTCACAAAAGAACTCTATTTTTATCAC

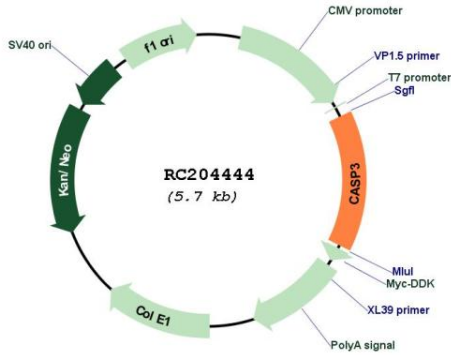
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



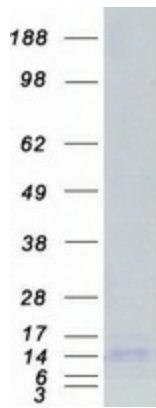
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|-------------------------------|---|
| Components: | The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water). |
| Reconstitution 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. |
| Note: | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required. |
| RefSeq: | NM_032991.2 , NP_116786.1 |
| RefSeq Size: | 2522 bp |
| RefSeq ORF: | 834 bp |
| Locus ID: | 836 |
| UniProt ID: | P42574 |
| Cytogenetics: | 4q35.1 |
| Domains: | CASc, ICE_p10, ICE_p20 |
| Protein Families: | Druggable Genome, ES Cell Differentiation/IPS, Protease |
| Protein Pathways: | Alzheimer's disease, Amyotrophic lateral sclerosis (ALS), Apoptosis, Colorectal cancer, Epithelial cell signaling in Helicobacter pylori infection, Huntington's disease, MAPK signaling pathway, Natural killer cell mediated cytotoxicity, p53 signaling pathway, Parkinson's disease, Pathways in cancer, Viral myocarditis |
| MW: | 31.6 kDa |
| Gene Summary: | The protein encoded by this gene is a cysteine-aspartic acid protease that plays a central role in the execution-phase of cell apoptosis. The encoded protein cleaves and inactivates poly(ADP-ribose) polymerase while it cleaves and activates sterol regulatory element binding proteins as well as caspases 6, 7, and 9. This protein itself is processed by caspases 8, 9, and 10. It is the predominant caspase involved in the cleavage of amyloid-beta 4A precursor protein, which is associated with neuronal death in Alzheimer's disease. [provided by RefSeq, Aug 2017] |

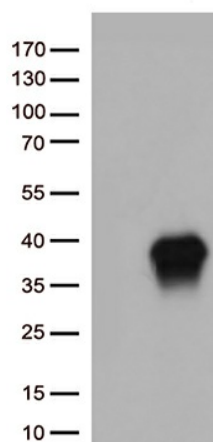
Product images:



Circular map for RC204444



Coomassie blue staining of purified CASP3 protein (Cat# [TP304444]). The protein was produced from HEK293T cells transfected with CASP3 cDNA clone (Cat# RC204444) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CASP3 (RC204444, 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-CASP3 (1:500).