

Product datasheet for **RG208304**

PRAK (MAPKAPK5) (NM_139078) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRAK (MAPKAPK5) (NM_139078) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PRAK
Synonyms:	MAPKAP-K5; MK-5; MK5; PRAK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG208304 representing NM_139078
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCGGAGGAGAGCGACATGGACAAAGCCATCAAGGAACTTCCATTTTAGAAGAATACAGTATCAATT
 GGACTCAGAAGCTGGGAGCTGGAATTAGTGGTCCAGTTAGAGTCTGTGTAAGAAATCTACTCAAGAACG
 GTTTGCGCTGAAAATTCTTCTTGATCGTCCAAAAGCTAGAAATGAGGTACGTCTGCACATGATGTGTGCC
 ACACACCCAAACATAGTTCAGATTATTGAAGTGTTTGCTAACAGTGTCCAGTTTCCCATGAGTCCAGCC
 CTAGGGCCCGACTCTTAATTGTAATGGAGATGATGGAAGGGGAGAGCTATTTACAGAATCAGCCAGCA
 CCGGCACTTTACAGAGAAGCAAGCCAGCCAAGTAACAAAGCAGATAGCTTTGGCTCTGCGGCACTGTAC
 TTGTTAAACATTGCGCACAGAGACCTCAAGCCTGAAAATCTGCTTTTTAAGGATAACTCTTTGGATGCC
 CAGTGAAGTTGTGTGACTTTGGATTTGCCAAGATTGACCAAGGTGACTTGATGACACCCAGTTCACCCC
 TTATTATGTAGCACCCAGGTACTGGAGCGCAAAGAAGGCATCAGAAGGAGAAATCTGGCATCATACCT
 ACCTCACCGACGCCCTACACTTACAACAAGAGCTGTGACTTGTGGTCCCTAGGGGTGATTATCTATGTGA
 TGCTGTGCGGATACCCTCTTTTTACTCCAAACACCACAGCCGGACTATCCCAAAGGATATGCGAAGAAA
 GATCATGACAGGCAGTTTTGAGTTCAGAGGAAGAGTGGAGTCAGATCTCAGAGATGGCCAAAGATGTT
 GTGAGGAAGCTCCTGAAGGTCAAACCGGAGGAGAGACTCACCATCGAGGGAGTGTGGACCAACCCCTGGC
 TCAATTCACCGAGGCCCTGGATAATGTCTGCCTTCTGCTCAGCTGATGATGGACAAGGCAGTGGTTGC
 AGGAATCCAGCAGGCTCACGCGGAACAGTTGGCCAACATGAGAATCCAGGATCTGAAAGTCAGCCTCAA
 CCCCTGCCTCAGTGAACAACCCATTCTGCGGAAGAGGAAGTACTTGGCACAAGCCAAAGGACAGTG
 TCTATATCCAGCACCATGAGAATGGAGCCGAGGATTCCAATGTTGCTTGGAAAAACTCCGAGATGTGAT
 TGCTCAGTGTATTCTCCCCAGGCTGGAGAGAATGAAGATGAGAAACTGAATGAAGTAATGCAGGAGGCT
 TGGAAGTATAACCGGAATGCAAACCTAAGAGATACTCTGCAGAGCTTCAAGTGGTGGATGGTGGAT
 TCACAGATAAAGTAGATCGACTAAAACCTGGCAGAAATTGTGAAGCAGGTGATAGAAGAGCAAACCGCTC
 CCACGAATCCCAA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG208304 representing NM_139078
 Red=Cloning site Green=Tags(s)

MSEESDMDKAIKETSILEEYSINWTQKLGAGISGPVRCVKKSTQERFALKILLDRPKARNEVRLHMMCA
 THPNIVQIIIEVFANSVQFPHESSPRARLLIVMEMMEGGELFHRI SQHRHFTEKQASQVTKQIALALRHCH
 LLNIAHRDLKPENLLFKDNLDAVPKLCDFGFAKIDQGLMTPQFTPYVAPQVLEAQRHQKEKSGIIP
 TSPTPTYNKSCDLWSLGVIIYVMLCGYPPFYSKHHSRTIPKDMRRKIMTGSFEFPEEWSQISEMAKDV
 VRKLLKVKPEERLTIEGLDHPWLNSTEALDNVLPQAQLMMDKAVVAGIQQAHAELANMRIQDLKVS
 PLHSVNNPILRKRKLLGTPKDSVYIHDHENGAEASNVALEKLRDVIAQCILPQAGENEDEKLNEMVQEA
 WKYNRECKLLRDLTQSFSWNGRGTDKVDRLKLAIEVKQVIEEQTTSHESQ

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_139078

ORF Size: 1419 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_139078.1](#), [NP_620777.1](#)

RefSeq Size: 2066 bp

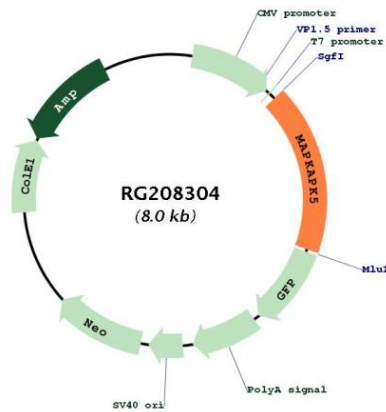
RefSeq ORF: 1422 bp

Locus ID: 8550

UniProt ID: [Q8IW41](#)

Cytogenetics: 12q24.12-q24.13
Domains: pkinase
Protein Families: Druggable Genome, Protein Kinase
Protein Pathways: MAPK signaling pathway
Gene Summary: The protein encoded by this gene is a tumor suppressor and member of the serine/threonine kinase family. In response to cellular stress and proinflammatory cytokines, this kinase is activated through its phosphorylation by MAP kinases including MAPK1/ERK, MAPK14/p38-alpha, and MAPK11/p38-beta. The encoded protein is found in the nucleus but translocates to the cytoplasm upon phosphorylation and activation. This kinase phosphorylates heat shock protein HSP27 at its physiologically relevant sites. Two alternately spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq, Nov 2012]

Product images:



Circular map for RG208304