

Product datasheet for **SC323359**

PRAK (MAPKAPK5) (NM_003668) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRAK (MAPKAPK5) (NM_003668) Human Untagged Clone
Tag:	Tag Free
Symbol:	PRAK
Synonyms:	MAPKAP-K5; MK-5; MK5; PRAK
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC323359 sequence for NM_003668 edited (data generated by NextGen Sequencing)
 ATGTCCGAGGAGAGCGACATGGACAAAGCCATCAAGGAACTTCCATTTAGAAGAATAC
 AGTATCAATTGGACTCAGAAGCTGGGAGCTGGAATTAGTGGTCCAGTTAGAGTCTGTGTA
 AAGAAATCTACTCAAGAACGGTTTGGCGTGAWRATTCTTCTTGATCGTCCAAAAGCTAGA
 AATGAGGTACGTCTGCACATGATGTGTGCCACACACCCAAACATAGTTCAGATTATTGAA
 GTGTTTGCTAACAGTGTCCAGTTTCCCCATGAGTCCAGCCCTAGGCCCCGACTCTTAATT
 GTAATGGAGATGATGGAAGGGGGAGAGCTATTTACAGAATCAGCCAGCACCGGCACTTT
 ACAGAGAAGCAAGCCAGCCAAGTAACAAAAGCAGATAGCTTTGGCTCTGCGGCACTGTCAC
 TTGTTAAACATTGCGCACAGAGACCTCAAGCCTGAAAATCTGCTTTTAAAGGATAACTCT
 TTGGATGCCCCAGTGAAGTTGTGTGACTTTGGATTTGCCAAGATTGACCAAGGTGACTTG
 ATGACACCCAGTTCACCCCTTATTATGTAGCACCCAGGTAAGGAGGCGCAAAGAAGG
 CATCAGAAGGAGAAATCTGGCATCATACTACCTACCGACGCCCTACACTTACAACAAG
 AGCTGTGACTTGTGGTCCCTAGGGGTGATTATCTATGTGATGCTGTGCGGATACCCTCT
 TTTTACTCCAAACACCACAGCCGACTATCCCAAAGGATATGCGAAGAAAGATCATGACA
 GGCAAGTTTGGAGTCCCAGAGGAAGAGTGGAGTCAAGATCTCAGAGATGGCCAAAGATGTT
 GTGAGGAAGTCCCTGAAGGTCAAACCGGAGGAGAGACTCACCATCGAGGGAGTGTGGAC
 CACCCCTGGCTCAATCCACCGAGGCCCTGGATAATGTGCTGCTTCTGCTCAGCTGATG
 ATGGACAAGGCAGTGGTTGCAGGAATCCAGCAGGCTCACGCGGAACAGTTGGCCAACATG
 AGAATCCAGGATCTGAAAGTCAAGCTCAAACCCCTGCACTCAGTGAACAACCCATTCTG
 CGAAGAGGAAGTTACTTGGCACCAGCCAAAGGACAGTGTCTATCCACGACCATGAG
 AATGGAGCCGAGGATTCCAATGTTGCTTGGAAAACTCCGAGATGTGATTGCTCAGTGT
 ATTTCCCCAGGCTGGAGAGAATGAAGATGAGAACTGAATGAAGTAATGCAGGAGCT
 TGGAAAGTATAACCGGGAATGCAAACCTCTAAGAGATACTCTGCAGAGCTTCAAGTGAAT
 GGTCTGGATTACAGATAAAGTAGATCGACTAAAAGTGGCAGAAATTGTGAAGCAGGTG
 ATAGAAGAGCAAACCACGTCCCACGAATCCCAATAA

Clone variation with respect to NM_003668.2
 152 a=>w;153 a=>r

5' Read Nucleotide Sequence: >OriGene 5' read for mutant NM_003668 unedited
 TCGGCACAAGGAACAACGAGCGGGAGGCGCGCACGGGAGACCAACAAGCAGAGCAGCACAAGCGAAC
 CGACAGAATACGCAACACGACACACCACAGGGCGGCCGGAACCCCGGCACGAGGGCCGAGCCCCCGCCC
 CCCCAGGCGCGCGGGGACAGGGCTGCTGAGCAGCCTCCGCTCTCCCGGCTGTGGGGCCCCACTGAGTA
 TGTCGGAGGAGAGCGACATGGACAAAGCCATCAAGGAACTTCCATTTAGAAGAATACAGTATCAATTG
 GACTCAGAAGCTGGGAGCTGGAATTAGTGGTCCAGTTAGAGTCTGTGTAAGAAATCTACTCAAGAACGG
 TTTGCGCTGATGATTCTTCTTGATCGTCCAAAAGCTAGAACGGTTTGGCGTATGATTCTTCTTGATCGT
 CAAAAGCTAGAACGGTTTGGCGTATGATTCTTCTTGATCGTCCAAAAGCTAGAACGGTTTGGCGTATG
 ATTCTCTGATCGTCCAAAAGCTAGACGGTTTGGCGTATGATCTCTGATCGTCCAAAAGCTAGACGGTTGCG
 CTGATGATCTCTGATCGTCAAAGCTAAACGGTTTGGCGTATGATTCTTCTGATCGTCAAAGCTAAACG
 GTTGCGCCTGATGATCCTTCTGATTGCGTCAAGCTAAATGAGGTACGTCTGGCATGAAGTGTGGCCACA
 CCAACTAGTTCAATATATGGAATGTTGGCTACGTGCAGTTTCCATGAGTCAAGCTTAGGCGATCTTATT
 GTATTGGATGATTGAGAGGGGAGCAATTCATGATCTGACGCGGGCTTACGTAAGCAGCACCGCGTATCA
 ACGATAGCTTGTCTGCGCAGTCTGCACTTGTTAC

Kinase Domain Sequence: >SC323359 kinase domain raw sequence. By performing [BLASTX](#) analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation
 AWATTTTAGAGWAAGTATCAATTGGACTCAGAAGCTGGGAGCTGGAATTAGTGGTCCAGTTAGAGTCTGT
 GTAAAGAAATCTACTCAAGAACGGTTTGGCGTATGATTCTTCTTGATCGTCCAAAAGCTAGAACGGTTT
 GCGCTGATGATTCTTCTTGATCGTCCAAAAGCTAGAACGGTTTGGCGTATGATTCTTCTTGATCGTCCA
 AAAAGCTAGAACGGTTTGGCGTATGATTCTTCTTGATCGTCCAAA

Restriction Sites:	Please inquire
ACCN:	NM_003668
Insert Size:	1900 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell. 2008 May p536-548.
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_003668.2 , NP_003659.2
RefSeq Size:	2060 bp
RefSeq ORF:	1416 bp
Locus ID:	8550
UniProt ID:	Q8IW41
Cytogenetics:	12q24.12-q24.13
Domains:	pkinase, TyrKc, S_TKc
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] Transcript Variant: This variant (1) is the more frequently occurring transcript.