

Product datasheet for MC201146

Vrk2 (BC013520) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Vrk2 (BC013520) Mouse Untagged Clone
Tag: Tag Free
Symbol: Vrk2
Synonyms: 2810003O05Rik; AI447698
Mammalian Cell Selection: Neomycin
Vector: PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >BC013520
GGCAGATGTGATGGCACCAAGAAGAAAAGAGAAATACAAGCTTCCGGTCCACTCCAGAAGGCAAAATT
CTGGATGATATGGAAGGAAACCGGTGGGCAAGATGATCGGCTCTGGAGGTTTGGACTGATAT
ACTTAGCTTTCCCAACAATAAACCAAAACAAGATGCAAGACATGTCATAAAGCTGGAGTATCAAGAAAA
TGGCCATTATTTTCAGAGCTTAAATTTTATCAGAGAGCTGCAAAAAGAGAATGTATCCAAAAGTGATA
CAACAGAGGAACTTGATTATTTAGGAATTCCTGTATTTTATGGATTTGGTCTGACTGATTTCAAAGGAA
GAAGTTACAGATTCATGGTAATGGAAAGACTTGGAAATAGATTTACAGAAACTCCTGGACCAGAAATGGTGG
TTTTAAAAAATAACCGTCTACAACCTGGCATCAGGATGCTGGATGACTGGAATATATACATGAAAAAT
GAGTATGTTTCATGGTGATATAAAAGCCGCAATCTACTGTTGGATTTTACAAATCCAGACCGGTTTATC
TTGCAGACTATGGACTTTCTACAGATATTGTCCAATGGGAACCACAAACAGTATCAGGAAGATCCAG
AAAGGGCCATAATGGGACAATAGAGTTTACAAGTTTGGATGCACACAAAGGAGTGGCCCATCCAGGAGG
AGTGATGTTGAAATCCTTGGTACTGCATGCTGCACTGGCTCTTCGGGAAGCTTCCCTGGGAAGCAAAGC
TGGACGACCTGTGGCTGTCCAGACTGCTAAAACCAACCTGCTGGATGAACTCCCAGAGTCGGTGCTTAA
GTGGGCTCCTTCTGGAAGCAGTTGCAGTGAACCTGTCAAGTACTTGATGTATGTTCAATTTAGCTTAT
GATGACAAGCCAGACTATCAGAAGCTCAAGAAAAATTTGAATCCAGATGGAGTACTTTTAGGGCCACTGG
AATTTTCCACTAAAGTACAGAGTGTCCGTGTGCGGACTCCAGCCCAACAAAAAGAAAACCTCAAGGACAAG
GAAAATACATGAATATTTGATATTTTCAGTGAGATGCAGAGTCTTCAACAAACACCCAGCTATATGAGT
TTCCAAGGTTTCATATTGCAAGCCCTATCTGGACTGCACTAGAAGAGATCCCATCAGGAAGCCAAGATCCC
TGCCCTCGGTACAGACACACGCCACGGGTAATCTGGGAGTACAGACTTGAAAGTTCTCCAAGGTTTTG
GCCTGCAATTTTTCAGTTGACTCTGAGTGAAGAGACAAAGGAGATGTTGATTACTATGGGATCACTATA
TTCTGTCTGCTGATATTTGATTTCTTGTCTTTGATTTTCTCTGAAGTATCAAATAAATTTGGTTTTTGC
TTTTGTTTTTATTTTTAAA AAA

Restriction Sites: RsrII-NotI
ACCN: BC013520
Insert Size: 1365 bp



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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).
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:	<u>BC013520</u> , <u>AAH13520</u>
RefSeq Size:	1473 bp
RefSeq ORF:	1365 bp
Locus ID:	69922
Cytogenetics:	11 A3.3
Gene Summary:	Serine/threonine kinase that regulates several signal transduction pathways. Isoform 1 modulates the stress response to hypoxia and cytokines, such as interleukin-1 beta (IL1B) and this is dependent on its interaction with MAPK8IP1, which assembles mitogen-activated protein kinase (MAPK) complexes. Inhibition of signal transmission mediated by the assembly of MAPK8IP1-MAPK complexes reduces JNK phosphorylation and JUN-dependent transcription. Phosphorylates histone H3. Phosphorylates 'Thr-18' of p53/TP53, and thereby increases its stability and activity. Phosphorylates BANF1 and disrupts its ability to bind DNA and reduces its binding to LEM domain-containing proteins. Downregulates the transactivation of transcription induced by ERBB2, HRAS, BRAF, and MEK1. Blocks the phosphorylation of ERK in response to ERBB2 and HRAS. May also phosphorylate MAPK8IP1. Can also phosphorylate the following substrates that are commonly used to establish in vitro kinase activity: casein, MBP and histone H2B, but it is not sure that this is physiologically relevant (By similarity).[UniProtKB/Swiss-Prot Function]