

Product datasheet for MC200120

Mapk13 (NM_011950) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Mapk13 (NM_011950) Mouse Untagged Clone

Tag: Tag Free
Symbol: Mapk13

Synonyms: SAPK4; Serk4

Mammalian Cell

Selection:

Neomycin

Vector: PCMV6-Kan/Neo (PCMV6KN)

E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >BC001992 sequence for NM_011950

GGCCGGGAGCCCGCGGGCAGCCACCGCAACCTCCTCGCAGGACCGCCACCACGGGGTCCGGGATGAGCCT GCGCCCGCGCACGTCGGCAGCGGGGCCTATGGAGCGGTGTGCTCGGCCATCGACAAGCGGACAGGGGAGA AGGTGGCCATCAAGAAGCTGAGCCGGCCCTTCCAGTCGGAGATCTTTGCCAAGCGCGCTTACCGCGAGCT TCTGCTCTTGAAGCACATGCACCATGAGAACGTCATTGGGCTTCTGGATGTCTTCACCCCTGCGTCTTCC TGGAATTCAGCGAGGATAAGGTCCAGTACTTGGTGTACCAGATGCTCAAAGGTCTAAAGTACATCCACTC CTGGACTTTGGGCTGGCCCGCCACACAGACACTGAGATGACGGGCTATGTGGTGACCCGCTGGTACCGGG CCCCGAGGTGATCCTCAGCTGGATGCATTACAACCAGACAGTCGACATCTGGTCTGTTTGGTTGCATCAT GGCAGAAATGCTGACTGGAAAGACACTCTTCAAGGGCAAGGACTACCTGGACCAGCTGACCCAGATCCTG AAAGTGACTGGGGTGCCAGGTGCCGAGTTCGTGCAGAAGCTGAAAGACAAGGCGGCCAAATCCTATATTC AGTCCCTGCCCAGAGCCCCAAGAAGGATTTCACACAGCTCTTTCCACGCGCCAGTCCGCAAGCTGCAGA CCTGCTCGACAAGATGCTGGAGCTGGATGTGGACAAGCGTCTGACCGCTGCTCAGGCACTGGCTCACCCC TTCTTTGAACCCTTCCGGGACCCTGAGGAGGAGACAGAGGCCCAGCAGCCTTTTGATGATGCCTTAGAAC ATGAGAAACTCAGTGTGGACGAATGGAAACAACACATCTACAAAGAGATCTCAAACTTCAGTCCCATAGC GTTGGCCTCCATGTAGCCCAGGCTGGCCTTGAGTCTTCCTCCTCTCTTTTTTGAGTCAGGATCTTACTG

Restriction Sites: RsrII-NotI

ACCN: NM 011950

Insert Size: 1101 bp



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

Mapk13 (NM_011950) Mouse Untagged Clone - MC200120

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: 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>BC001992</u>, <u>AAH01992</u>

RefSeq Size: 1376 bp
RefSeq ORF: 1101 bp
Locus ID: 26415
UniProt ID: Q9Z1B7

Cytogenetics: 17 A3.3

Gene Summary:

Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. MAPK13 is one of the four p38 MAPKs which play an important role in the cascades of cellular responses evoked by extracellular stimuli such as proinflammatory cytokines or physical stress leading to direct activation of transcription factors such as ELK1 and ATF2. Accordingly, p38 MAPKs phosphorylate a broad range of proteins and it has been estimated that they may have approximately 200 to 300 substrates each. MAPK13 is one of the less studied p38 MAPK isoforms. Some of the targets are downstream kinases such as MAPKAPK2, which are activated through phosphorylation and further phosphorylate additional targets. Plays a role in the regulation of protein translation by phosphorylating and inactivating EEF2K. Involved in cytoskeletal remodeling through phosphorylation of MAPT and STMN1. Mediates UV irradiation induced up-regulation of the gene expression of CXCL14. Plays an important role in the regulation of epidermal keratinocyte differentiation, apoptosis and skin tumor development. Phosphorylates the transcriptional activator MYB in response to stress which leads to rapid MYB degradation via a proteasome-dependent pathway. MAPK13 also phosphorylates and down-regulates PRKD1 during regulation of insulin secretion in pancreatic beta cells.[UniProtKB/Swiss-Prot Function]