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Product datasheet for RC203782

MLK3 (MAP3K11) (NM_002419) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MLK3 (MAP3K11) (NM_002419) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MLK3
Synonyms:	MEKK11; MLK-3; MLK3; PTK1; SPRK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC203782 representing NM_002419
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCCCTTGAAGAGCCTCTTCCTCAAGAGCCCTCTAGGGTCATGGAATGGCAGTGGCAGCGGGGGTG
GTGGGGGCGGTGGAGGAGGCCGGCCTGAGGGGTCTCCAAAGGCAGCGGGTTATGCCAACCCGGTGTGGAC
AGCCCTGTTCGACTACGAGCCCAGTGGGCAGGATGAGCTGGCCCTGAGGAAGGGTGACCGTGTGGAGGTG
CTGTCCCGGGACGCAGCCATCTCAGGAGACGAGGGCTGGTGGGCGGGCCAGGTGGGTGGCCAGGTGGGCA
TCTTCCCGTCCAACTATGTGTCTCGGGGTGGCGGCCCGCCCCCCTGCGAGGTGGCCAGCTTCCAGGAGCT
GCGGCTGGAGGAGGTGATCGGCATTGGAGGCTTTGGCAAGGTGTACAGGGGCAGCTGGCGAGGTGAGCTG
GTGGCTGTGAAGGCAGCTCGCCAGGACCCCGATGAGGACATCAGTGTGACAGCCGAGAGCGTTCGCCAGG
AGGCCCGGCTCTTCGCCATGCTGGCACACCCCAACATCATTGCCCTCAAGGCTGTGTGCCTGGAGGAGCC
CAACCTGTGCCTGGTGATGGAGTATGCAGCCGGTGGGCCCCTCAGCCGAGCTCTGGCCGGGCGGCGCGTG
CCTCCCCATGTGCTGGTCAACTGGGCTGTGCAGATTGCCCGTGGGATGCACTACCTGCACTGCGAGGCCC
TGGTGCCCGTCATCCACCGTGATCTCAAGTCCAACAACATTTTGCTGCTGCAGCCCATTGAGAGTGACGA
CATGGAGCACAAGACCCTGAAGATCACCGACTTTGGCCTGGCCCGAGAGTGGCACAAAACCACACAAATG
AGTGCCGCGGGCACCTACGCCTGGATGGCTCCTGAGGTTATCAAGGCCTCCACCTTCTCTAAGGGCAGTG
ACGTCTGGAGTTTTGGGGTGCTGCTGTGGGAACTGCTGACCGGGGAGGTGCCATACCGTGGCATTGACTG
CCTTGCTGTGGCCTATGGCGTAGCTGTTAACAAGCTCACACTGCCCATCCCATCCACCTGCCCCGAGCCC
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AGGCTGGAAGCGCGAGATCCAGGGTCTCTTCGACGAGCTGCGAGCCAAGGAAAAGGAACTACTGAGCCGC
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TGCAGAGCCAGGCCAGGCATGGGGCCGCCAGTCCCCCCGACGTCTGGAGGACTCAAGCAATGGAGAGCGG
CGAGCATGCTGGGCTTGGGGTCCCAGTTCCCCCAAGCCTGGGGAAGCCCAGAATGGGAGGAGAAGGTCCC
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CTCTGCTCCTGGCACCCCAGGCACCCCACGTTCACCACCCCTGGGCCTCATCAGCCGACCTCGGCCCTCG
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CACAGCCTGCACCCCGCCGAGCACCCTGGACCTTGTTCCCGGACTCAGACCCCTTCTGGGACTCCCCACC
TGCCAACCCCTTCCAGGGGGGCCCCCAGGACTGCAGGGCACAGACCAAAGACATGGGTGCCCAGGCCCCG
TGGGTGCCGGAAGCGGGGCCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC203782 representing NM_002419
Red=Cloning site Green=Tags(s)

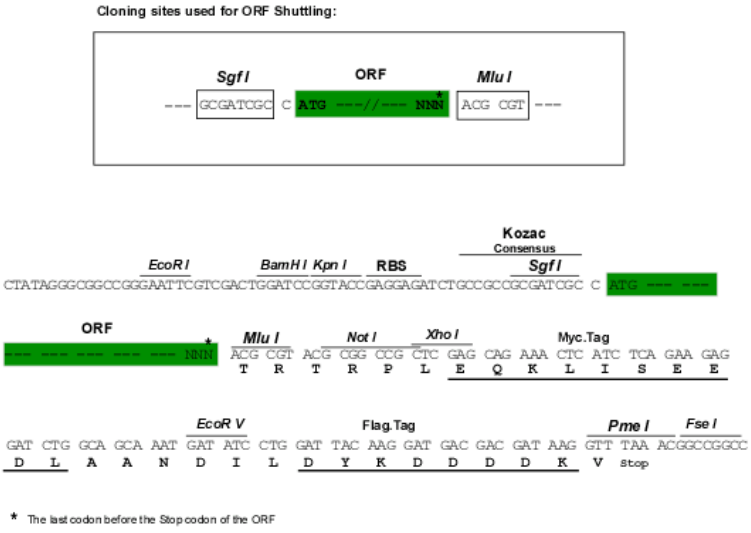
MEPLKSLFLKSPLGSWNGSGSGGGGGGGGRPEGSPKAAGYANPVWTALFDYEPSGQDELALRKGDRVEV
LSRDAAISGDEGWWAGQVGGQVGIFPSNYVSRGGGPPPCEVASFQELRLEEVIGIGGFGKVYRGSWRGEL
VAVKAARQDPDEDISVTAESVRQEARLFAMLAHPNIIALKAVCLEEPNLCLVMEYAAGGPLSRALAGRRV
PPHVLVNWAVQIARGMHYLHCEALVPVIHRDLKSNNILLLQPIESDDMEHKTLKITDFGLAREWHKTTQM
SAAGTYAWMAPEVIKASTFSKGSDVWSFGVLLWELLTGEVPYRGIDCLAVAYGVAVNKLTLPIPSTCPEP
FAQLMADCWAQDPHRRPDFASILQQLEALEAQVLREMPRDSFHSMQEGWKREIQGLFDELRAKEKELLSR
EEELTRAAREQRSQAEQLRRREHLLAQWELEVFERELTLLLQQVDRERPHVRRRRGTFKRSKLRARDGGE
RISMPLDFKHRITVQASPGLDRRRNVFEVGPGDSPTFPRFRAIQLEPAEPGQAWGRQSPRRLEDSSNGER
RACWAWGPSSPKPGEAQNGRRRSRMDEATWYLDSDDSSPLGSPSTPPALNGNPPRPSLEPEEPKRPVPAE
RGSSSGTPKLIQRALLRGTALLASLGLGRDLQPPGGPGRERGESPTTPPTPTPAPCPTEPPPSPLICFSL
KTPDSPPTPAPLLLDLGIPVGQRSAKSPRREEEPRGGTVSPPPGTSRSAPGTPGTPRSPPLGLISRPRPS
PLRSRIDPWSFVSAGPRPSPLPSPQPAPRRAPWTLFPDSDPFWDSPPANPFQGGPQDCRAQTKDMGAQAP
WVPEAGP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3411_g01.zip

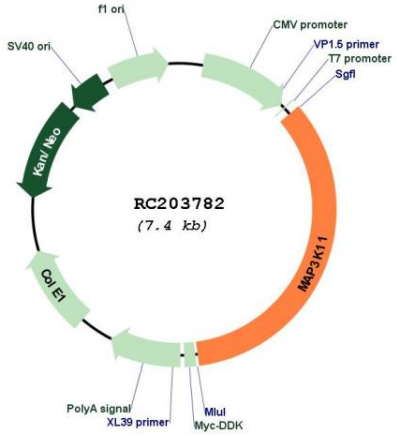
Restriction Sites: SgfI-MluI

Cloning Scheme:

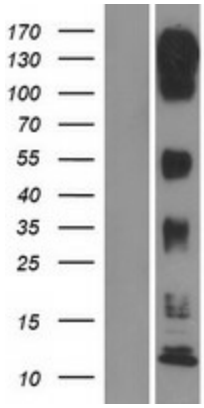


ACCN:	NM_002419
ORF Size:	2541 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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_002419.4
RefSeq Size:	3574 bp
RefSeq ORF:	2544 bp
Locus ID:	4296
UniProt ID:	Q16584
Cytogenetics:	11q13.1
Domains:	pkinase, TyrKc, SH3, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	MAPK signaling pathway
MW:	92.5 kDa
Gene Summary:	The protein encoded by this gene is a member of the serine/threonine kinase family. This kinase contains a SH3 domain and a leucine zipper-basic motif. This kinase preferentially activates MAPK8/JNK kinase, and functions as a positive regulator of JNK signaling pathway. This kinase can directly phosphorylate, and activates IkappaB kinase alpha and beta, and is found to be involved in the transcription activity of NF-kappaB mediated by Rho family GTPases and CDC42. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC203782



Western blot validation of overexpression lysate (Cat# [LY419338]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203782 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).