

Product datasheet for **MR227365**

Mark3 (NM_022801) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mark3 (NM_022801) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mark3
Synonyms:	1600015G02Rik; A430080F22Rik; C-TAK1; Emk2; ETK-1; ETK1; MPK10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR227365 representing NM_022801
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

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Protein Sequence: >MR227365 representing NM_022801
 Red=Cloning site Green=Tags(s)

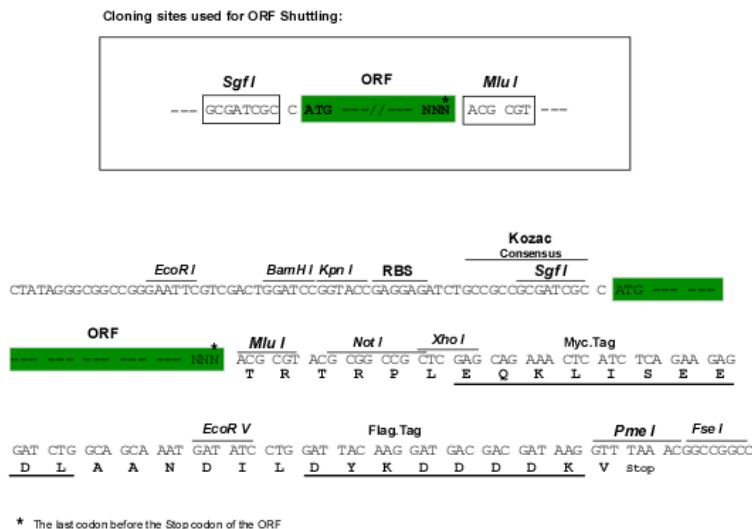
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 TFCGSPPYAAPEL FQGKKYDGP EVDVWSLGVILYTLVSGSLPFDGQNLKELRERVL RGYRIPFYMSTDC
 ENLLKRFLV LNPVKRG TLEQIMKDRWINAGHEEDELKPFVEPELDISDQKRIDIMVGMGYSQEEIQESLS
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 HAGPAIPSVVAYPKRSQTSTADSDLKEDGIPSRKSSSSAVGGKIAPASPLGNAGNPNKADIPERKKSP
 AVSSNTASGGMTRNTYVCSERCAADRHSVIQNGKNSAIPDERTPVASTHSISSATTPDRIRFPRGTA
 SRSTFHGQPRERTATYNGPPASPSLSHEATPLSQTRSRGSTNLF SKLTSKL TRSRNVSSEQDENREAK
 PRSLRFTWSMKTTSMDP SMDMREIRKVL DANNC DYEQRERFLLCVHGDGHAENLVQWEME VCKL PRLS
 LNGVRFKRISGTSIAFKNIASKIANELKL

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_022801

ORF Size: 2187 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_022801.4](#), [NP_073712.2](#)

RefSeq Size: 3343 bp

RefSeq ORF: 2190 bp

Locus ID: 17169

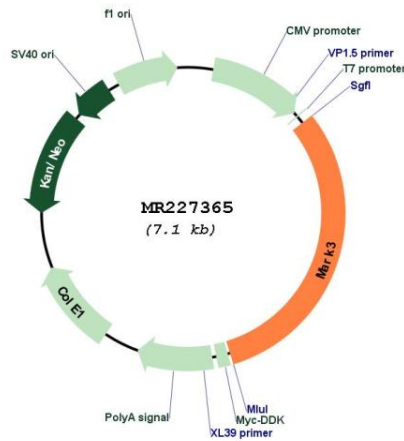
UniProt ID: [Q03141](#)

Cytogenetics: 12 F1

MW: 81.9 kDa

Gene Summary: Serine/threonine-protein kinase. Involved in the specific phosphorylation of microtubule-associated proteins for MAPT/TAU, MAP2 and MAP4. Phosphorylates CDC25C. Regulates localization and activity of some histone deacetylases by mediating phosphorylation of HDAC7, promoting subsequent interaction between HDAC7 and 14-3-3 and export from the nucleus. Negatively regulates the Hippo signaling pathway and antagonizes the phosphorylation of LATS1. Cooperates with DLG5 to inhibit the kinase activity of STK3/MST2 toward LATS1.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR227365