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Product datasheet for RC209743

EPM2A (NM_005670) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EPM2A (NM_005670) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EPM2A
Synonyms:	EPM2; MELF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC209743 representing NM_005670
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCGCTTCCGCTTTGGGGTGGTGGTGCCACCCGCCGTGGCCGGCGCCAGGCCGGAGCTGCTGGTGGTGG
GGTCGCGGCCCGAGCTGGGGCGTTGGGAGCCGCGCGGTGCCGTCCGCCTGAGGCCGGCCGGCACCGCGGC
GGGCGACGGGGCCCTGGCGCTGCAGGAGCCGGGCCTGTGGCTCGGGGAGGTGGAGCTGGCGGCCGAGGAG
GCGGCGCAGGACGGGGCGGAGCCGGGCCGCGTGGACACGTTCTGGTACAAGTTCCTGAAGCGGGAGCCGG
GAGGAGAGCTCTCCTGGGAAGGCAATGGACCTCATCATGACCGTTGCTGTACTTACAATGAAAACAACTT
GGTGGATGGTGTGTATTGTCTCCCAATAGGACACTGGATTGAGGCCACTGGACACACCAATGAAATGAAG
CACACAACAGACTTCTATTTTAATATTGCAGGCCACCAAGCCATGCATTATTCAAGAATTCTACCAAATA
TCTGGCTGGGTAGCTGCCCTCGTCAGGTGGAACATGTAACCATCAAACTGAAGCATGAATTGGGGATTAC
AGCTGTAATGAATTTCAAGACTGAATGGGATATTGTACAGAATTCCTCAGGCTGTAACCGCTACCCAGAG
CCCATGACTCCAGACACTATGATTAAACTATATAGGGAAGAAGGCTTGGCCTACATCTGGATGCCAACAC
CAGATATGAGCACCGAAGGCCGAGTACAGATGCTGCCCCAGGCGGTGTGCCTGCTGCATGCGCTGCTGGA
GAAGGGACACATCGTGTACGTGCACTGCAACGCTGGGGTGGGCCGCTCAACCGCGGCTGTCTGCGGCTGG
CTCCAGTATGTGATGGGCTGGAATCTGAGGAAGGTGCAGTATTTCCTCATGGCCAAGAGGCCGGCTGTCT
ACATTGACGAAGAGGCCTTGGCCCGGGCACAAGAAGATTTTTTCCAGAAATTTGGGAAGGTTCGTTCTTC
TGTGTGTAGCCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

>RC209743 representing NM_005670
Red=Cloning site Green=Tags(s)

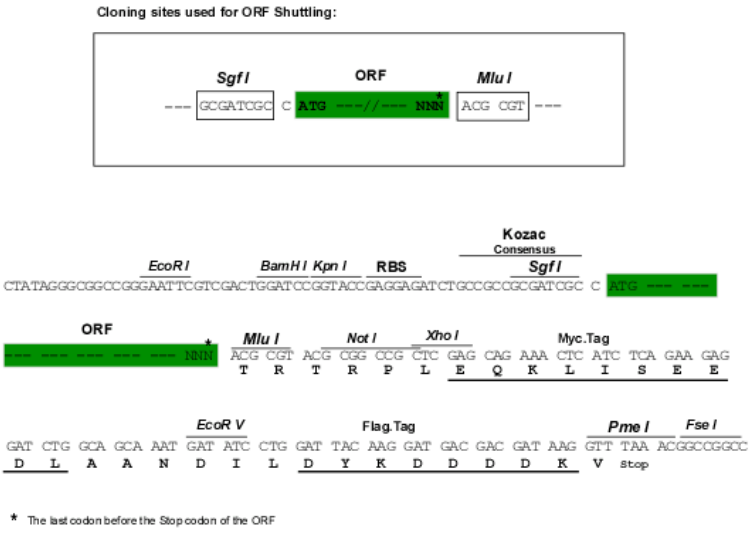
MRFRFGVVVPPAVAGARPELLVVGSRPELGRWEPRGAVRLRPAGTAAGDGALALQEPGLWLGEVELAAEE
AAQDGAEPGRVDTFWYKFLKREPGGELSWEGNGPHHDRCCTYNENNLVDGVYCLPIGHWIEATGHTNEMK
HTTDFYFNIAGHQAMHYSRILPNIWLGSCPRQVEHVTIKLKHELGITAVMNFKTEWDIVQNSSGCNRYPE
PMTPDTMIKLYREEGLAYIWMPTPDMSTEGRVQMLPQAVCLLHALLEKGHIVYVHCNAGVGRSTAAVCGW
LQYVMGWNLRKVQYFLMAKRPAVYIDEEALARAQEDFFQKFGKVRSSVCSL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3576_a09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005670

ORF Size: 993 bp

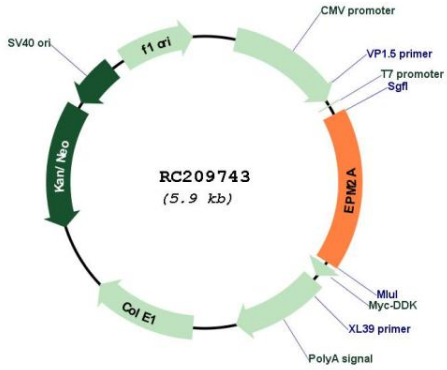
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

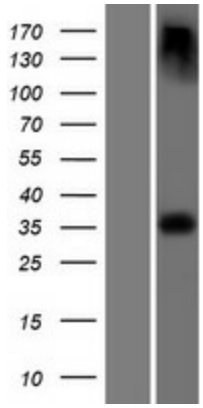
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_005670.4
RefSeq Size:	3474 bp
RefSeq ORF:	996 bp
Locus ID:	7957
UniProt ID:	O95278
Cytogenetics:	6q24.3
Domains:	DSPc
Protein Families:	Druggable Genome, Phosphatase
MW:	37 kDa
Gene Summary:	This gene encodes a dual-specificity phosphatase and may be involved in the regulation of glycogen metabolism. The protein acts on complex carbohydrates to prevent glycogen hyperphosphorylation, thus avoiding the formation of insoluble aggregates. Loss-of-function mutations in this gene have been associated with Lafora disease, a rare, adult-onset recessive neurodegenerative disease, which results in myoclonus epilepsy and usually results in death several years after the onset of symptoms. The disease is characterized by the accumulation of insoluble particles called Lafora bodies, which are derived from glycogen. [provided by RefSeq, Jan 2018]

Product images:



Circular map for RC209743



Western blot validation of overexpression lysate (Cat# [LY417140]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209743 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).