

Product datasheet for RC223753

EVA1 (MPZL2) (NM_144765) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EVA1 (MPZL2) (NM_144765) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EVA1
Synonyms:	DFNB111; EVA; EVA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223753 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGGATCGCC

ATGTATGGCAAGAGCTCTACTCGTGCGGTGCTTCTCTCCTTGGCATAACAGCTCACAGCTCTTTGGCCTA
TAGCAGCTGTGGAAATTTATACCTCCCGGGTCTGGAGGCTGTTAATGGGACAGATGCTCGGTTAAATG
CACTTTCTCCAGCTTTGCCCTGTGGGTGATGCTCTAACAGTGACCTGGAATTTTCGTCTCTAGACGGG
GGACCTGAGCAGTTTGTATTCTACTACCACATAGATCCCTCCAACCCATGAGTGGGCGGTTTAAGGACC
GGGTGTCTTGGGATGGGAATCCTGAGCGGTACGATGCCTCCATCCTTCTCTGGAACTGCAGTTCGACGA
CAATGGGACATACACCTGCCAGGTGAAGAACCACCTGATGTTGATGGGGTATAGGGGAGATCCGGCTC
AGCGTCGTGCACACTGTACGCTTCTCTGAGATCCACTTCTGGCTCTGGCCATTGGCTCTGCCTGTGCAC
TGATGATCATAATAGTAATTGTAGTGGTCTTCCAGCATTACCGAAAAAGCGATGGGCCGAAAGAGC
TCATAAAGTGGTGGAGATAAAATCAAAAGAAGAGGAAAGGCTCAACCAAGAGAAAAAGGTCTCTGTTAT
TTAGAAGACACAGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC223753 protein sequence
Red=Cloning site Green=Tags(s)

MYGKSSTRAVLLLLGIQLTALWPIAAVEIYTSRVLEAVNGTDARLKCTFSSFAPVGDALTVTWNFRPLDG
 GPEQVFVYYHIDPFQPMGRFKDRVSWDGNPERYDASILLWKLQFDDNGTYTCQVKNPPDVGVIQEIRL
 SVVHTVRFSEIHFLALAIQSACALMIIIVVVLFFQHYRKKRWAERAHKVVVEIKSKEEERLNQEKKVS
 LEDTD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6438_g09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_144765

ORF Size: 645 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_144765.2](#)

RefSeq Size: 1396 bp

RefSeq ORF: 648 bp

Locus ID: 10205

UniProt ID: [O60487](#)

Cytogenetics: 11q23.3

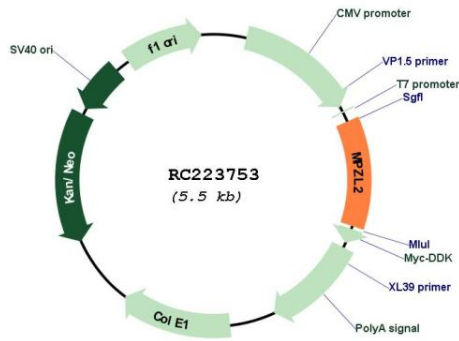
Domains: ig, IGv, IG

Protein Families: Transmembrane

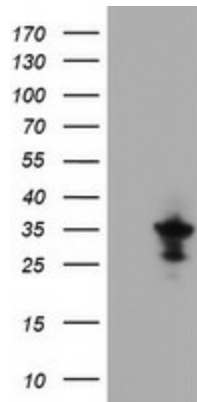
MW: 24.5 kDa

Gene Summary: Thymus development depends on a complex series of interactions between thymocytes and the stromal component of the organ. Epithelial V-like antigen (EVA) is expressed in thymus epithelium and strongly downregulated by thymocyte developmental progression. This gene is expressed in the thymus and in several epithelial structures early in embryogenesis. It is highly homologous to the myelin protein zero and, in thymus-derived epithelial cell lines, is poorly soluble in nonionic detergents, strongly suggesting an association to the cytoskeleton. Its capacity to mediate cell adhesion through a homophilic interaction and its selective regulation by T cell maturation might imply the participation of EVA in the earliest phases of thymus organogenesis. The protein bears a characteristic V-type domain and two potential N-glycosylation sites in the extracellular domain; a putative serine phosphorylation site for casein kinase 2 is also present in the cytoplasmic tail. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008]

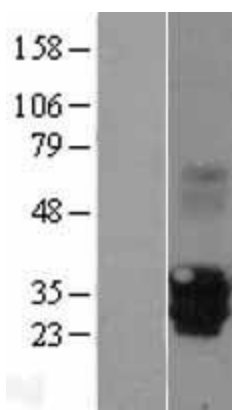
Product images:



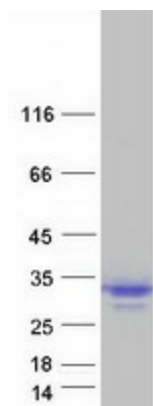
Circular map for RC223753



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MPZL2 (Cat# RC223753, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MPZL2 (Cat# [TA504980]). Positive lysates [LY403409] (100ug) and [LC403409] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403409]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223753 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MPZL2 protein (Cat# [TP323753]). The protein was produced from HEK293T cells transfected with MPZL2 cDNA clone (Cat# RC223753) using MegaTran 2.0 (Cat# [TT210002]).