

## Product datasheet for **RC204628**

### **EVA1 (MPZL2) (NM\_005797) Human Tagged ORF Clone**

#### Product data:

Product Type: Expression Plasmids

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: >RC204628 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGTATGGCAAGAGCTCTACTCGTGGGTGCTTCTTCTCCTTGGCATACAGCTCACAGCTCTTTGGCCTA  
TAGCAGCTGTGGAAATTTATACCTCCCGGTGCTGGAGGCTGTTAATGGGACAGATGCTCGGTTAAATG  
CACTTTCTCCAGCTTTGCCCTGTGGGTGATGCTCTAACAGTGACCTGGAATTTTCGTCTCTAGACGGG  
GGACCTGAGCAGTTTGTATTCTACTACCACATAGATCCCTTCCAACCCATGAGTGGGCGGTTTAAGGACC  
GGGTGTCTTGGGATGGGAATCCTGAGCGGTACGATGCCTCCATCTTCTCTGAAACTGCAGTTTCGACGA  
CAATGGGACATACACCTGCCAGGTGAAGAACCACCTGATGTTGATGGGGTATAGGGGAGATCCGGCTC  
AGCGTCGTGCACACTGTACGCTTCTCTGAGATCCACTTCTGGCTCTGGCCATTGGCTCTGCCTGTGCAC  
TGATGATCATAATAGTAATTGTAGTGGTCTCTCCAGCATTACCGAAAAAGCGATGGGCCGAAAGAGC  
TCATAAAGTGGTGGAGATAAAATCAAAGAAGAGGAAAGGCTCAACCAAGAGAAAAAGGTCTCTGTTAT  
TTAGAAGACACAGAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC204628 protein sequence  
Red=Cloning site Green=Tags(s)

MYGKSSTRAVLLLLGIQLTALWPIAAVEIYTSRVLEAVNGTDARLKCTFSSFAPVGDALVTWNFRPLDG  
GPEQVFVYYHIDPFQPMGRFKDRVSWDGNPERYDASILLWKLQFDDNGTYTCQVKNPPDVGIVGEIRL  
SVVHTVRFSEIHFLALAGSACALMIIIVVVVLFQHYRKKRWAERAHKVVEIKSKEEERLNQEKVSVY  
LEDTD

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV



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**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6068\\_b05.zip](https://cdn.origene.com/chromatograms/mk6068_b05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_005797

**ORF Size:** 645 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_005797.4](#)

**RefSeq Size:** 2871 bp

**RefSeq ORF:** 648 bp

**Locus ID:** 10205

**UniProt ID:** [O60487](#)

**Cytogenetics:** 11q23.3

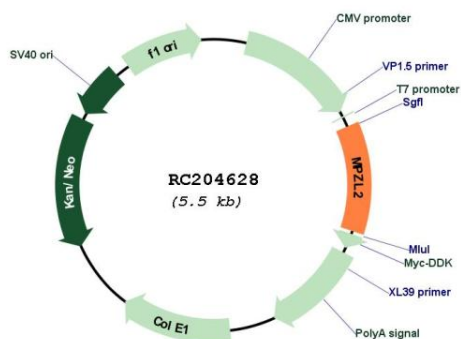
**Domains:** ig, IGv, IG

**Protein Families:** Transmembrane

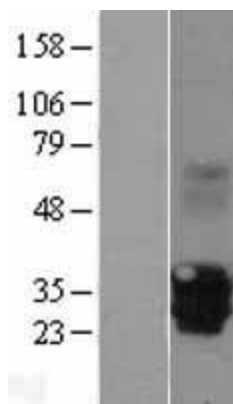
**MW:** 24.5 kDa

**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]

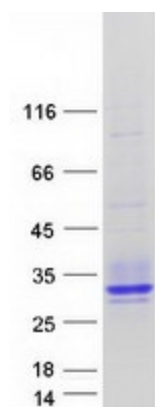
## Product images:



Circular map for RC204628



Western blot validation of overexpression lysate (Cat# [LY417083]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204628 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MPZL2 protein (Cat# [TP304628]). The protein was produced from HEK293T cells transfected with MPZL2 cDNA clone (Cat# RC204628) using MegaTran 2.0 (Cat# [TT210002]).