

Product datasheet for **MC225483**

Apela (NM_001297554) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Apela (NM_001297554) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Apela
Synonyms:	Ela; Elabela; Ende; ENSMUSG00000074303; Gm10664
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC225483 representing NM_001297554 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

**ATGCGATTCCAGCCCTTTTTGGGTATTTTTATTTTTGCCATGAGTCTCCTTTTTATCAGTGAACAGA
AACCACTTAACCTTCCAGGAGAAGAACTATACAGACACAACCTGCTTTCGAGGAGATGCATTCCACT
TCATTCTCGAGTGCCTTCCATGA**

ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja3705_a10.zip

Restriction Sites: Sgfl-Mlul

ACCN: NM_001297554

Insert Size: 165 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.



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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:	<ol style="list-style-type: none">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:	<u>NM_001297554.1, NP_001284483.1</u>
RefSeq Size:	990 bp
RefSeq ORF:	165 bp
Locus ID:	100038489
UniProt ID:	<u>PODMC4</u>
Cytogenetics:	8
Gene Summary:	Endogenous ligand for the apelin receptor (APLNR) (By similarity). Hormone required for mesendodermal differentiation, blood vessels formation and heart morphogenesis during early development and for adult cardiovascular homeostasis (PubMed:28371822, PubMed:28854362, PubMed:28890073, PubMed:28663440). Drives internalization of the APLNR (By similarity). Acts as a motogen by promoting mesendodermal cell migration during gastrulation by binding and activating APLNR (By similarity). Acts as an early embryonic regulator of cellular movement with a role in migration and development of cardiac progenitor cells (PubMed:28854362). May act as a chemoattractant for the activation of angioblast migration toward the embryonic midline, i.e. the position of the future vessel formation, during vasculogenesis (By similarity). Positively regulates sinus venosus (SV)-derived endothelial cells migration into the developing heart to promote coronary blood vessel sprouting (PubMed:28890073). Plays a role in placental vascular development; promotes placental trophoblast invasion and spiral artery remodeling in the uterus (PubMed:28663440). Involved in the regulation of maternal cardiovascular homeostasis to prevent gestational hypertension and for potent cardioprotective functions during heart failure (PubMed:28371822, PubMed:28663440). Mediates myocardial contractility in an ERK1/2-dependent manner (By similarity).[UniProtKB/Swiss-Prot Function]