

Product datasheet for RC215328

PEG3 (NM_006210) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PEG3 (NM_006210) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PEG3
Synonyms:	PW1; ZKSCAN22; ZNF904; ZSCAN24
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215328 representing NM_006210 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >RC215328 representing NM_006210
 Red=Cloning site Green=Tags(s)

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Chromatograms: https://cdn.origene.com/chromatograms/mk6168_c09.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



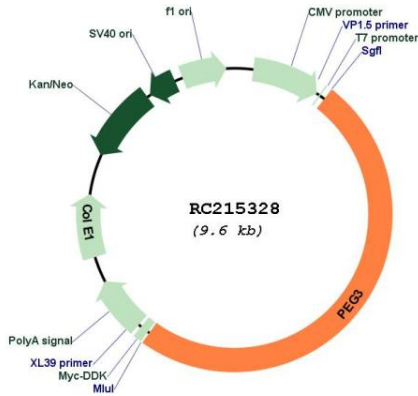
ACCN: NM_006210

ORF Size:	4764 bp
OTI Disclaimer:	<p>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 or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	<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:	NM_006210.3
RefSeq Size:	6371 bp
RefSeq ORF:	4767 bp
Locus ID:	5178
UniProt ID:	Q9GZU2
Cytogenetics:	19q13.43
Protein Families:	Transcription Factors
MW:	180.6 kDa

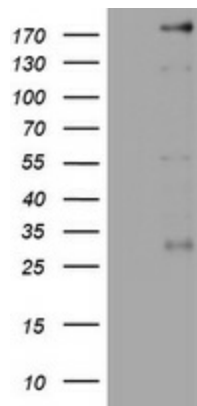
Gene Summary:

In human, ZIM2 and PEG3 are treated as two distinct genes though they share multiple 5' exons and a common promoter and both genes are paternally expressed (PMID:15203203). Alternative splicing events connect their shared 5' exons either with the remaining 4 exons unique to ZIM2, or with the remaining 2 exons unique to PEG3. In contrast, in other mammals ZIM2 does not undergo imprinting and, in mouse, cow, and likely other mammals as well, the ZIM2 and PEG3 genes do not share exons. Human PEG3 protein belongs to the Kruppel C2H2-type zinc finger protein family. PEG3 may play a role in cell proliferation and p53-mediated apoptosis. PEG3 has also shown tumor suppressor activity and tumorigenesis in glioma and ovarian cells. Alternative splicing of this PEG3 gene results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Sep 2009]

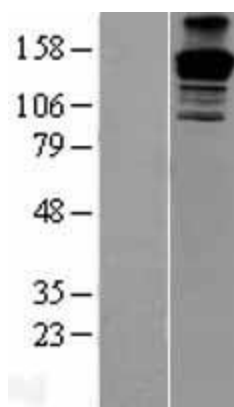
Product images:



Circular map for RC215328



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PEG3 (Cat# RC215328, 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-PEG3(Cat# [TA801960]). Positive lysates [LY401879] (100ug) and [LC401879] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY431717]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC228689] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).