

Product datasheet for **SC327323**

PEG3 (NM_001146184) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PEG3 (NM_001146184) Human Untagged Clone
Tag:	Tag Free
Symbol:	PEG3
Synonyms:	PW1; ZKSCAN22; ZNF904; ZSCAN24
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC327323 representing NM_001146184. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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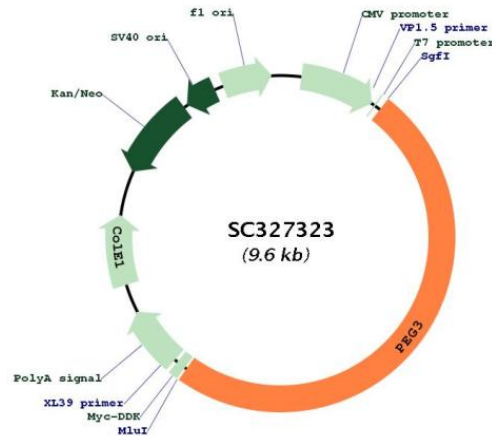


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Restriction Sites:

Sgfl-MluI

Plasmid Map:


ACCN: NM_001146184

Insert Size: 4767 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: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001146184.1](#)

RefSeq Size: 8689 bp

RefSeq ORF: 4767 bp

Locus ID: 5178

UniProt ID: [Q9GZU2](#)

Cytogenetics: 19q13.43
Protein Families: Transcription Factors
MW: 180.8 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]

Transcript Variant: This variant (2) is missing a 5' non-coding exon, therefore, has a shorter 5' UTR compared to variant 1. Variants 1 and 2 both encode the same isoform (1).