

Product datasheet for **RG228689**

PEG3 (NM_001146186) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PEG3 (NM_001146186) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PEG3
Synonyms:	PW1; ZKSCAN22; ZNF904; ZSCAN24
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG228689 representing NM_001146186 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >RG228689 representing NM_001146186
 Red=Cloning site Green=Tags(s)

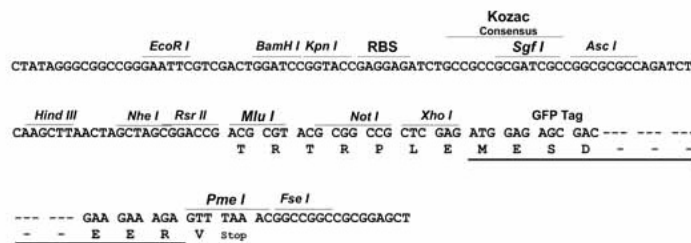
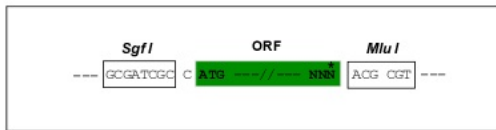
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TRTRPLE - GFP Tag - V

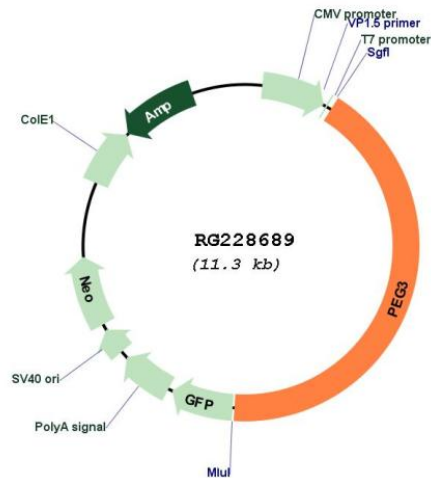
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001146186

ORF Size: 4764 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_001146186.1](#), [NP_001139658.1](#)

RefSeq Size: 8722 bp

RefSeq ORF: 4767 bp

Locus ID: 5178

UniProt ID: [Q9GZU2](#)

Cytogenetics: 19q13.43

Protein Families: Transcription Factors

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]