

Product datasheet for **MG218532**

Prex2 (NM_029525) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prex2 (NM_029525) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Prex2
Synonyms:	6230420N16Rik; AI316880; AI553603; C030045D06Rik; D430013K02; Depdc2; P-Rex2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG218532 representing NM_029525 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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Protein Sequence: >MG218532 representing NM_029525
 Red=Cloning site Green=Tags(s)

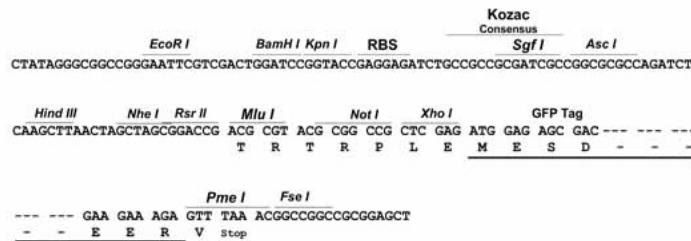
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TRTRPLE - GFP Tag - V

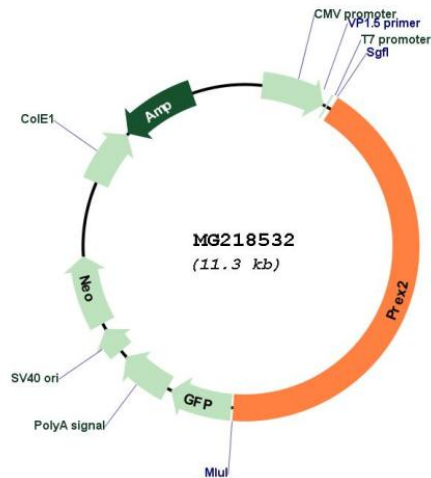
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_029525

ORF Size: 4794 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_029525.1](#), [NP_083801.1](#)

RefSeq Size: 11057 bp

RefSeq ORF: 4797 bp

Locus ID: 109294

UniProt ID: [Q3LAC4](#)

Cytogenetics: 1 A2

Gene Summary: Functions as a RAC1 guanine nucleotide exchange factor (GEF), activating Rac proteins by exchanging bound GDP for free GTP. Its activity is synergistically activated by phosphatidylinositol 3,4,5-trisphosphate and the beta gamma subunits of heterotrimeric G protein. Mediates the activation of RAC1 in a PI3K-dependent manner. May be an important mediator of Rac signaling, acting directly downstream of both G protein-coupled receptors and phosphoinositide 3-kinase (By similarity).[UniProtKB/Swiss-Prot Function]