

Product datasheet for **MR217113**

Prex2 (NM_001033636) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Prex2 (NM_001033636) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Prex2
Synonyms: 6230420N16Rik; AI316880; AI553603; C030045D06Rik; D430013K02; Depdc2; P-Rex2
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR217113 representing NM_001033636
Red=Cloning site **Blue**=ORF **Green**=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGAAGCCTCTCAATGCTTTAGATGAACTTTACCGGCTGATCACCTCATTTATCAGATCCAACGCATCG
CTGCCTGTGTGAACACACCTTGCAGCGCCTCTGGAGTCGGACTGCTGTCAGTTTCTTCAGAGCTGTGTGA
CAGGCTCGGTGCCTGTACATCATCATGTGCAGCAGTGGTGTGCACCGGTGCACCCTGAGTGTGACACTA
GAGCAAACCATCACTTTAGCAAGAAGCCATGGGCTCCCTCCTCGGTACATTATGCAGGCCATGGATGTGA
TGAGAAAGCAGGGTGCAAGAGTTTCAAGAACAGCTAAAAAATTGGGCGTTAGAGACCGGACTCCTCAGTC
AGCTCAAAGGCTGTACAAGCTCTGCGAGCCACCACCTCCAGTAGGAGAAGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR217113 representing NM_001033636
Red=Cloning site **Green**=Tags(s)

MKPLNALDELYRLITSFIRSKRIAACVNTPCSASGVGLLSVSSLCDRLGACHIIMCSSGVHRCTLSVTL
EQITLARSHGLPPRYIMQAMDVMRKQGARVQNTAKNLGVRDRTPQSAPRLYKLCPPPPVGGEE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

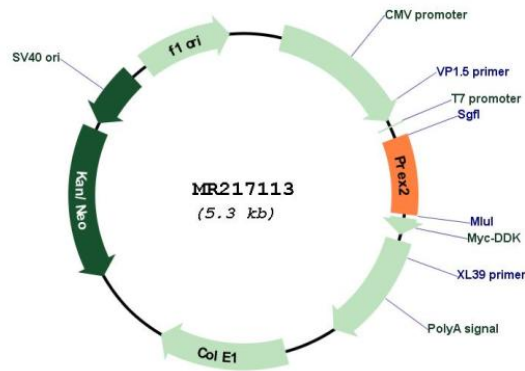


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Cloning Scheme:



Plasmid Map:



ACCN: NM_001033636

ORF Size: 402 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:	<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_001033636.4</u> , <u>NP_001028808.1</u>
RefSeq Size:	6540 bp
RefSeq ORF:	405 bp
Locus ID:	109294
Cytogenetics:	1 A2
MW:	15.1 kDa
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]