

Product datasheet for **MC212200**

Prex2 (NM_001033636) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Prex2 (NM_001033636) Mouse Untagged Clone
Tag: Tag Free
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
Fully Sequenced ORF: >MC212200 representing NM_001033636
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGAAGCCTCTCAATGCTTTAGATGAACTTTACCGGCTGATCACCTCATTTATCAGATCCAACGCATCG
CTGCCTGTGTGAACACACCTTGCAGCGCCTCTGGAGTCGGACTGCTGTCAGTTTCTCAGAGCTGTGTGA
CAGGCTCGGTGCCTGTCACATCATGTGCAGCAGTGGTGTGCACCGGTGCACCCTGAGTGTGACACTA
GAGCAAACCATCACTTTAGCAAGAAGCCATGGGCTCCCTCCTCGGTACATTATGCAGGCCATGGATGTGA
TGAGAAAGCAGGGTGCAAGAGTTTCAAGAACAGCTAAAAAATTGGGCGTTAGAGACCGGACTCCTCAGTC
AGCTCAAAGGCTGTACAAGCTCTGCGAGCCACCACCTCCAGTAGGAGAAGAA**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-MluI
ACCN: NM_001033636
Insert Size: 405 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).
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_001033636.4](#), [NP_001028808.1](#)

RefSeq Size: 6540 bp

RefSeq ORF: 405 bp

Locus ID: 109294

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]

Transcript Variant: This variant (2) uses a different segment for its 5' UTR and lacks much of the 5' coding region when compared to variant 1. The resulting protein (isoform 2) is much shorter when it is compared to isoform 1. Sequence Note: The RefSeq transcript and protein were derived from transcript and genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.