

Product datasheet for MC223380

Ankrd27 (NM_145633) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ankrd27 (NM_145633) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ankrd27
Synonyms:	AA408090; BC016493; D330003H11Rik; Varp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC223380 representing NM_145633 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTCTATATGATGAAGATCTCCTGAAAAACCTTTCTACCTGGCCCTTCAGAAGTGGCGCCCGACT
TGTGCAGCAAGGTGGCCAGATCCATGGCATTGCTCCTAGTGCCTTGACAGGAAGCCTGCCCGCAGTGT
GCAGGCCCTCCTGCCAGTTCGAGTCTATGTTTTGGTACCCACGGAAGGACACTTTCAGACCTTAGATGGA
AAGGCTGTCGTCATTGAAGGAAACAGGATTAAGCTAGGAGCAGGTTTTGCTTGCCTTCTCTGTGCCCA
TCCTCTTTGAGGAGACTTCTACAACGAGAAAGAGGAGATTTTCAGCATTCTCTGCATTGCTCATCCTTT
GGAGAGGAGAGACTTCAGAAGAACCTTCAGCGCCTGCAGATCCTTTCTCCCTGAAAACCATCGAAGAT
GTGAGAGAATTTTTGGGAAGACTCAGAGAAATTTGACAAGAACATTGCCTCTTTCCACCGGACGTTC
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GCAGCTTCTCCGAGACTCTCACCTGAAGTTCTTGCAAAGCAGGAGGCCAGATGAACCTGATGAAGCAG
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TCTCTGGGAGGCTGAATGACCCGTCAGTTGTCACTCCTTTCTCCAGAGATGACAGAGGTCAAACACCCCT
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GCCACAGACTATCATGGGTCCACCCCTTACATCTGGCATGTGAGAAAGGCTTCCAAAGTGTGACGCTGC
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CATACTCCAGGTCCAGAGGTGACTGTCCACCTACCACCCACGAGGCGAGTGTCTCAGTCTTAG
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA
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- Restriction Sites:** SgfI-MluI
- ACCN:** NM_145633
- Insert Size:** 3147 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_145633.3](#), [NP_663608.3](#)
- RefSeq Size:** 4292 bp

RefSeq ORF: 3147 bp

Locus ID: 245886

UniProt ID: [Q3UMR0](#)

Cytogenetics: 7 B2

Gene Summary: May be a guanine exchange factor (GEF) for Rab21, Rab32 and Rab38 and regulate endosome dynamics (By similarity). May regulate the participation of VAMP7 in membrane fusion events; in vitro inhibits VAMP7-mediated SNARE complex formation by trapping VAMP7 in a closed, fusogenically inactive conformation (By similarity). Involved in peripheral melanosomal distribution of TYRP1 in melanocytes; the function, which probably is implicating vesicle-trafficking, includes cooperation with Rab32, Rab38 and VAMP7 (PubMed:19403694, PubMed:21187289). Involved in the regulation of neurite growth; the function seems to require its GEF activity, probably towards Rab21, and VAMP7 but not Rab32/38 (PubMed:19745841, PubMed:22171327). Proposed to be involved in Golgi sorting of VAMP7 and transport of VAMP7 vesicles to the cell surface; the function seems to implicate kinesin heavy chain isoform 5 proteins, GOLGA4, RAB21 and MACF1. Required for the colocalization of VAMP7 and Rab21, probably on TGN sites (By similarity). Involved in GLUT1 endosome-to-plasma membrane trafficking; the function is dependent of association with VPS29 (By similarity). Regulates the proper trafficking of melanogenic enzymes TYR, TYRP1 and DCT/TYRP2 to melanosomes in melanocytes (PubMed:26620560).[UniProtKB/Swiss-Prot Function]