

## Product datasheet for **MC220935**

### Ankrd27 (BC065093) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ankrd27 (BC065093) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ankrd27
Synonyms:	MGC25907, Varp
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>BC065093 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTCTATATGATGAAGATCTCTGAAAACCCCTTTCTACCTGGCCCTTCAGAAGTGGCGCCCCGACT  
TGTGCAGCAAGGTGGCCAGATCCATGGCATTGCCTAGTGCCTTGACAGGAAGCCTGCCCGCAGTGT  
GCAGGCCCTCCTGCCAGTTCGAGTCTATGTTTTGGTACCCACGGAAGGACACTTTACAGACCTTAGATGGA  
AAGGCTGTCGTCATTGAAGGAAACAGGATTAAGCTAGGAGCAGGTTTTGCTTGCCTTCTCTGTGCCCA  
TCCTCTTTGAGGAGACTTTCTACAACGAGAAAGAGGAGAGTTTTAGCATTCTCTGCATTGCTCATCCTTT  
GGAGAGGAGAGAGACTTCAGAAGAACCCTCAGCGCCTGCAGATCCTTTCTCCCTGAAAACCATCGAAGAT  
GTGAGAGAATTTTTGGGAAGACTCAGAGAAATTTGACAAGAACATTGCCTCTTTCCACCGGACGTTCC  
GAGAATGTGAAAGAAAGAGCCTCCGCCACCACATAGACTCCGTAATGCTCTCTACACCAATGCCTCCA  
GCAGCTTCTCCGAGACTCTCACCTGAAGGTTCTTGAAAGCAGGAGGCCAGATGAACCTGATGAAGCAG  
GCCGTAGAGATGTATGTCCATCACGATATTTACGACCTGATCTTTAAATACGTGGGACCATGGAGGCGA  
GCGAGGATGCCGCCTTTAACAAAATCACGAGAAGCCTTCAAGATCTCCAGCAGAAAGACATCGCGGTGAA  
ACCCGAGTTCAAGTCAACATCCCTCGGGCAAAGAGAGAGCTGGGTCAAGTTGAACAAGTGTACGTGCCA  
CAGCAGAAGCTGCTGTGCTGAGGAAGGTGGTCCAGCTCATGACACAATCTCCCAGCCAGAGAGTGAAC  
TGGAGACCATGTGTGCCGATGATCTCTCGGTCTGTTATATCTGCTCGTGAAGACAGAGATCCCTAA  
CTGGATGGCAAATTTGAGCTACATCAAAAACCTCAGATTTAGCAGCTCGGCCAAAGATGAGCTAGGATAC  
TGCCTGACCTCAGTCGAGGCTGCGATTGAATACATCCGGCAAGGAAGTCTCTCCACGAAGACGCTGACG  
CTGAGGGATTTGGCGACAGACTATTTCTCAAGCAGCGGATGAACCTGCTGTCCAGATGACATCAACACC  
CATCGACTGCCTGTTCAAGCACATCGCCTCTGGTAACCAAAAGGAAGTGGAAAGACTTCTGAGCCAAGAT  
GACCAGGACAAAGACGCCATGCAAAAGATGTGCCACCCACTTTGTTCTGTGAGGACTGTGAGAAGCTTA  
TCTCTGGGAGGCTGAATGACCCGTCAGTTGTCACTCCTTTCTCCAGAGATGACAGAGGTCAAACCCCTT  
CCATGTGGCTGCCCTCTGTGGTCAGGCATCCCTCATTGACTTCTGGTCTCCAAAGGTGCCGTAGTGAAC  
GCCACAGACTATCATGGTCCACCCCTTACATCTGGCATGTCAGAAAGGCTTCAAAGTGTGACGCTGC



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TGCTGCTGCACTACAAGGCCAGCACTGAGGTTCAGGACAACAACGGCAACACCCCGCTGCACCTGGCCTG  
CACCTATGGGCAGGAGGATTGCGTGAAGGCCCTGGTCTACTATGATGTCCAGGCCTGCAGATTGGATATT  
GGTAATGAGAAAGGAGACACAGCCCTGCACATTGCTGCACGCTGGGGTTACGAGGGCATCATAGAGACAC  
TGCTGCAGAATGGAGCCCCACAGCAGTCCAGAACAGACTGAAGGAAACACCACTCAAGTGTGCTCTGAA  
CTCGAAGATTCTGTCTATCATGGAAGCTCATCACCTATCCTCTGACAGGAGGCCAAGGCCTTCTGAGGTT  
CCTGCACAGTCCCCTACACGCTCTGTGGATTCCATCAGCCAGGGCTCCTCCACCTCCAGCTTTTCTTCCA  
TATCGGTGAGCTTCAGGCAAGAAGAGGTCAAAAAGGACTACAGGGAGAACTGGCCAGGATTTCTGCCAA  
TGGGCTTAGTGTGAATGTGACCAACCAGGACGGCTTCTCTCCCTGCACATGGCTGCCCTGCATGGCCGC  
ACAGACCTCGTCCCCTCCTGCTGAAGCACGGTCTTACTCAGGTGCCAGAAACAAGCCAAGCCGTCC  
CGCTCCACCTGGCCTGCCAGCAGGGCACTTTCAGGTGGCAAAATGTCTCTTAGATTCCAATGCAAAACC  
TAATAAAAAGGACCTCAGTGGGAACACACCCCTCATTGTGCCTGCTCTGCCGGCCACCATGAAGTCGCT  
GCGCTGTTGCTACAGCACGGGGCTCCATCAATGCTTGAACAACAAGGCAACACGGCCCTGCATGAGG  
CTGTGATGGGAAGGCACACCCTGGTAGTGGAGTGCTTCTGTTCTACGGGGCGTCGGTTGACATCCTGAA  
CAAGAGGCAGTACACGGCGCGGACTGTCCGAGCAGGACTCAAAAATAATGGAGTTGCTGCAGGTAGTG  
CCAGGCTGTGTTGCGTCTCTAGACAGCGTCGAGGAGGCAGACCAGAGGGTTACGTGACTGTTGAGATCA  
GGAGAAAATGGAACCCCAAAATGTACAACCTGCCAGAGGAACCTCTTAGGAGACAGTTTTGCCTCATTAA  
CCCGGGGGGTTCGGTTCCAGGAGAGGACATCCAGGGAGACTATGGGAAGGGATAGAAGTGTGCCCGATCTT  
GCAGGACGTTCTTTCAGGAGCCAGAGAAGCAAAGAGTCAACGGAAAGCAGAGTGACCTGTGACAGCTGA  
GCAGGTATCAGACCTCTGAGGAAGGAAACAAGGGGCTCCCGGAGAGGCCCGTGTGAGACAGGCTGCTCC  
AGGACACCGGCCGATGGTCCGCAGACACACAGTCAATGACGCAGCCATACTCCAGGTCCCAGAGGTGACT  
GTCCACCTCACCACCCAGAGGGAGTGTTCTCAGTCTTAG

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** Sgfl-Mlul
- ACCN:** BC065093
- Insert Size:** 2982 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:** [BC065093](#), [AAH65093](#)
- RefSeq Size:** 4105 bp
- RefSeq ORF:** 2981 bp
- Locus ID:** 245886

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]