

## Product datasheet for SC105947

### VARP (ANKRD27) (NM\_032139) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	VARP (ANKRD27) (NM_032139) Human Untagged Clone
Tag:	Tag Free
Symbol:	VARP
Synonyms:	PP12899; VARP
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC105947 sequence for NM_032139 edited (data generated by NextGen Sequencing)

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ATGGCTGTATGATGAAGACCTCTGAAAAATCCTTTCTATCTGGCTCTGCAAAAGTGC
CGCCCTGACTTGTGCAGCAAAGTGGCCCAAATCCATGGCATTGTCTTAGTACCCTGCAAA
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AAATTAGGAGCTGGTTTTGCCTGTCTTCTCAGTGCCCATCTCTTTGAAGAACTTTTC
TACAATGAAAAAGAAGAGAGTTTCAGCATCCTGTGTATAGCCCATCTTTGAAAAAGAGA
GAGAGTTCAGAAGAGCCTTTGGCACCTCAGATCCCTTTCCCTGAAAACCATTGAAGAT
GTGAGAGAGTTCTTGGGAAGACACTCCGAGCGATTTGACAGGAACATCGCCTCTTTCCAT
CGAACATTCGGAGAATGCGAGAGAAAGAGCCTCCGTACCACATAGACTCAGCGAATGCT
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Clone variation with respect to NM\_032139.2  
1488 a=>g

**5' Read Nucleotide Sequence:**

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>OriGene 5' read for NM_032139 unedited
GGTCACAATTTGTATACGACTCCTATAGGGCGGCCGGAATTCGCACGAGGGTGGGCTAT
AGGGCCAGATCGCCGCGGAGGGTGGTGGGCATCGAGGTCCCAGCAGCGGACGAGGGAGG
TGCCGCGCTCGCCAGGATGGGCTGGGAATGAAGCGATGTAGCCTTTTAAGAGATTTGCT
CTGACCCATCTGAAGTCCATATGGCTCTGTATGATGAAGACCTCCTGAAAAATCCTTTCT
ATCTGGCTCTGCAAAAGTGCCGCCCTGACTTGTGCAGCAAAGTGGCCCAATCCATGGCA
TTGTCTTAGTACCTGCAAAGGAAGCCTGTCGAGCAGCATCCAGTCTACTTGTGAGTTG
AGTCTACATTTTGATACCTGTGGAAGAGCATTTCAGACCTTAATGGAAGGATGTCT
TTATTCAGGGAAACAGGATTAATTAGGAGCTGGTTTTGCCTGTCTTCTCAGTGCCCA
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CCCATCCTTTGAAAAAGAGAGAGTTCAGAAGAGCCTTTGGCACCTCAGATCCCTTTT
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GGAACATCGCCTCTTCCATCGAACATTCGAGAATGCGAGAGANAGAGCCTCCGTCCAC
ACATAGACTCAGCGAATGCTCTCTACACCAAATGCCTNCAGCAGTCTCTGAGGGACTCTC
ACCTGANAAATGCTCNGCCAGCANNGAGCCAGATGAACCTGATGAAGCAGGCAGTGGAGA
TATACGTCCATCATGAAATTACCACCTGATCTTTAATACGTGGGACATGGNAGCAGTGA
GGATGCGGGCTTTACAC

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<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_032139 unedited TATGGACCGCGGCACGCAATCTAGAATCGAGTTTTTTTTTTTTTTTTTTTTAAAAACATAAA GTTTACTGTTTCTTTCCATCATTTGGCACATATCCAAGGCACATTAGAAAATTAGAAAT CATAAATTACTTTGTAGAAAAATAATCCCTCCCTTCTCTGTACATACACAAGTGTTC CAAGAACATGGACAAAACCATTTCCCTATCACAAGGTCATTTGAAAACGGACTCAGGACA AACCCATATACGTGTAGCTCTAGGCCAATAACATAAAAAAACAAGTATAATCTATAGAAA TTTATAAAAAAGGAATAAATGGCAATAAATCTAACCGAAAGTAACTCTGACCTGGTTTGT GCTGTTAAGTTTTGAATTTGAATCAAAAGACTAAGAAAAGATGTGCCAAATCTACTCTCT AATCCAGTAACCATCCCCTCAGGTGTGAGTGTGACAGACATTCAAGGGAGTTCTCAACA AAAAGGGATGTTTCTAGAAATACTGCTACAGGTGCACGTGTAGTAACCGAATATCTGTAC CTACTTGTAGAAAGAAAATGATAACCACCTTTCCCATGTGCATGATGTGGAACAGGTC TGATGCATCCTTTCACTAAAATGAATATCAAAATGGGATTGAGGCATCTTTGGTTTCGAG TGTTGCTTTGCAAAGAACATTGTCCAGCTGCTGCTTTCTCCTTCAGATATGACATTTCT AGCCTGGCCTCTACAGTACCATGAAACCTAAATTACTTACTTCTCCAGCTTAATCCTA AGTGGAGGAATTCTANCTGGGGCTTGTGAATGTACACGGTCANAGAAGTTTANCACCTTT GGGAGGGAGAGGCAAATGCCNGGTGAAACCTTTCCACTGTGACAACAACCTTACTAA AAGACCATGCCCTTGCTNAAGGACTGGAGCTCTGGGATTTTTGCCGGTCCAATGATTCA TACCTTGAAGGAAAGAAGGGGGG
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_032139
<b>Insert Size:</b>	4640 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_032139.1</a></u> , <u><a href="#">NP_115515.1</a></u>
<b>RefSeq Size:</b>	4501 bp
<b>RefSeq ORF:</b>	4461 bp
<b>Locus ID:</b>	84079
<b>UniProt ID:</b>	<u><a href="#">Q96NW4</a></u>
<b>Cytogenetics:</b>	19q13.11
<b>Domains:</b>	ANK, VPS9

**Gene Summary:**

May be a guanine exchange factor (GEF) for Rab21, Rab32 and Rab38 and regulate endosome dynamics (PubMed:16525121, PubMed:18477474). 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 (PubMed:23104059). Involved in peripheral melanosomal distribution of TYRP1 in melanocytes; the function, which probably is implicating vesicle-trafficking, includes cooperation with Rab32, Rab38 and VAMP7 (By similarity). Involved in the regulation of neurite growth; the function seems to require its GEF activity, probably towards Rab21, and VAMP7 but not Rab32/38 (By similarity). 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 (PubMed:22705394). Required for the colocalization of VAMP7 and Rab21, probably on TGN sites (PubMed:19745841). Involved in GLUT1 endosome-to-plasma membrane trafficking; the function is dependent of association with VPS29 (PubMed:24856514). Regulates the proper trafficking of melanogenic enzymes TYR, TYRP1 and DCT/TYRP2 to melanosomes in melanocytes (By similarity).[UniProtKB/Swiss-Prot Function]