

Product datasheet for **SC304188**

DENND3 (NM_014957) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DENND3 (NM_014957) Human Untagged Clone
Tag:	Tag Free
Symbol:	DENND3
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF sequence for NM_014957 edited

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ATGCGCTCCTTGAGAAAAGAGAGAGAAGCCAGACCAGAGCAGTGGAAGGGCCTCCCG
GGGCCCCCAGAGCGCCAGAGCCTGAGGATGTCGCGTCCCGGGCGGTGGACCTCCTC
ACCCTGCCGACAGCTGTGCTTCCCAGGGGTGTGTGCGTGGCCACTGAACCTAAGGAGGAT
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TACCTCCGAGGGCTCGTTTATCTGATGCAGGGACAGCTGCTGAACGCCCTCTTGGACTTC
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 AAGGAGCTGGTGGCGCACATGGACACCGTGAAGGACGCTGTGCTCGGCTGAGGACAGATAC
 GTGCTGAGTGGTCCGGCAGGGAGGGGAAAGTCGCCATTTGAAAGGCGAATAA

- Restriction Sites:** Please inquire
- ACCN:** NM_014957
- 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).
- OTI Annotation:** The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
- 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_014957.2](#), [NP_055772.2](#)

RefSeq Size: 5458 bp

RefSeq ORF: 3597 bp

Locus ID: 22898

UniProt ID: [A2RUS2](#)

Cytogenetics: 8q24.3

Gene Summary: Guanine nucleotide exchange factor (GEF) activating RAB12. Promotes the exchange of GDP to GTP, converting inactive GDP-bound RAB12 into its active GTP-bound form (PubMed:20937701). Regulates autophagy in response to starvation through RAB12 activation. Starvation leads to ULK1/2-dependent phosphorylation of Ser-472 and Ser-490, which in turn allows recruitment of 14-3-3 adapter proteins and leads to up-regulation of GEF activity towards RAB12 (By similarity). Also plays a role in protein transport from recycling endosomes to lysosomes, regulating, for instance, the degradation of the transferrin receptor and of the amino acid transporter PAT4 (PubMed:20937701). Starvation also induces phosphorylation at Tyr-858, which leads to up-regulated GEF activity and initiates autophagy (By similarity).[UniProtKB/Swiss-Prot Function]