

Product datasheet for **MC200502**

Dab2 (NM_001037905) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dab2 (NM_001037905) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Dab2
Synonyms:	5730435J12Rik; AA960054; AI957090; D15Wsu122e; D630005B22Rik; Doc-2; Doc2; p96
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >BC006588 sequence for NM_001037905
 TAAACAGTGTACTTTGTGGGTTCTGTCCTTTTGAGACCTGCCCGTCGGGGATTGGCTGGTATCAGTGACT
 GTCTACTGCTGGATTTTCTGCTTGCCTTCCCGTCATGTCTAACGAAGTAGAAACAAGCACAGCCAATGGT
 CAGCCTGACCAACAGGCTGCCCGAAAGCACCATCAAAGAAGGAGAAGAAGAAAGTTCTGAAAAGACAG
 ACGAGTACTTGTGGCCAGGTTCAAAGGTGATGGTGTAAAATACAAGCCAAGCTAATCGGTATTGATGA
 TGTGCCTGATGCTCGAGGAGACAAAATGAGCCAGGATTCTATGATGAAACTCAAGGGAATGGCAGCAGCT
 GGTCTCTCAGGGACAACAAGCAAAGAATCTGGGTCAACATTTCTTGTCTGGCATAAAAATCATTG
 ATGAGAAAACCTGGGTAATTGAACATGAACATCCAGTAAATAAGATTTCTTTCATTGCTCGTGATGTGAC
 AGACAACAGAGCATTGTTATGTGTGTGGAGGTGAAGGCCAGCATCAATTTTTTCTATAAAAACAGGG
 CAACAGGCTGAACCATTAGTCGTCGATCTTAAAGACCTTTTTCAAGTTATCTATAATGTAAGAAAAAGG
 AAGAAGATAAGAAAAAGTTGAAGAAGCCAACAAGCAGAGAAGATAAGGAGTGAAGTGAAGGCCCTAATGACCT
 TGATGATCAAGCTAACAAATGAAGCTGGGTGTTGACCAGATGGATTTGTTTGGGACATGTCTACACCT
 CCTGGCCTAAATAGTCCAACATCTCAGCAAACGACTTGTCTGCTCAGACATCTTGCCTCAGAACCTC
 CAGGCCAGATGTCCCCACAGGACAACCTGCAGTCCCGCAGTCAACTTTCTGGATCTCTCAAAGGCAA
 TGCTCCTGCCCCAGTGGGGCCCCCTGTAGGTCTAGGTACGGTCCAGTAAACACCCCCCAAGCAGGACCC
 TGGACGCCTGTTGCTACAGTCCTTCGACAACCTGTGGTCCAGGAGCCATAATAAGTGGCCAGCCTCCCA
 GTTTTGGCCAGCCACTCGTTTTTGGTACAACCCAGCAGTACAAGTCTGGAAATCAGCCTCCATCATTTC
 AACCCAGCTTCCCTCCACCCCCACAGTTTGGTGTCTACCACATCTGTGGCGCCAACGCTTGGTCA
 TCCACAAGCCCTCTGGGGAATCCTTTTCAGAGTAATAATATCTTCCACCTCCCACCATGTCCACTCAGT
 CCTCTCCTCAGCCTATGATGTCTCTGTCTGGCCACACCCGCTCAACCACCTCCCCGAAATGGCCCACT
 AAAGGACATTCACAGTGACGCTTCACTGGCTTAGACCCCTTGGGGATAAAGAGGTCAAAGAAGTGAAA
 GAAATGTTAAGGACTTCCAGTGCAGGACCCACTCTTGTCCCTCAAGGAAGGGGAGACGCCTCCCT
 CTGGGACTTCAAGCGCCTTCTCCAGTTACTTCAACAATAAAGTTGGCATTCTCAGGAGCAGTAGACCA
 TGATGATTTTGTGCAATCAACTGTTGAACAAGATTAATGAACCACCAAGCCAGCCCCGAGACAAGGT
 GTCTCTTGGGTACCAAGTCTGCTGACAATCACTTGAAGAACCTTTCTCAAAGGGTTCAGCTCATCAA
 ACCCTCTGTGGTTTCTCAGCCTGCATCTTCTGATCCCCACAGGAGCCCTTTCGAAATCCTTTGCCTA
 GTTTCTGAAGTTGTAATGATGACTATCCAGATGAGCAAAAGACTGGCTTTGGTCAAGAATGAAGCAGACA
 GCCAGAAACATGTTGACCTCTGCTCCTCGCTCCAGCTTTGACGTATTATCTGTTACCCTATTTGTTTGGC
 CTCTTGTACTTGTAAAATGCCTTTCATTTTTCTGTCTAGGCTAAAGCTAAACTTAAACTATGGCTTTACG
 TAAATTAAGCTCCTAACTCTAGCTCCAATATAAATGAAGTAGCTTCCCTATCAAATCCTTGTCTGTT
 GTGCCCTCGAAACTTCCAGAATATTCCATTTACCTCCACTTGGGAGGAGCGGCTACCTTTACCC
 TTAATATCACACTGCCTTGAGTCAATGTCCAAATACTCATAGCTCTCAAAGTCATTTGGGGTTCTGGTT
 CCTAAAGCATCCTATTAATAGGGAAGTAAGACACCTTGCTTCTATGTCCACTCAGAAAGAAATTTATTT
 AATAAAATGAAAGCAAGACTAATTCTCAAATCCACCCAAGGACCATTTTGGATGGTCTTTCTCAGCT
 AACTGCACCATTTACCAACCTGCCCAAGTGGTGCTTACATTTGACTTGAAGAAGAGAAAGAGCTAACT
 CAAAACACAAGGCATCATTCAAAGCTAATAAAACAATTTCTCCCTGGGGCCCCACATTGTTTTATTCCA
 GATACGTTGCAGCTGTTGACCTGATGACATTATGCCCTACATTTTCTTGAAGATCCTGATTTTATTT
 CATGTGATTTTTGTTTCTCAATAAAGATGATTATTGTGTGCATTACTAAAAATAATAAAGTATAATTTCT
 TCTCAA

- Restriction Sites:** RsrII-NotI
- ACCN:** NM_001037905
- Insert Size:** 1647 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: [BC006588](#), [AAH06588](#)

RefSeq Size: 2634 bp

RefSeq ORF: 1647 bp

Locus ID: 13132

UniProt ID: [P98078](#)

Cytogenetics: 15 2.15 cM

Gene Summary:

Adapter protein that functions as clathrin-associated sorting protein (CLASP) required for clathrin-mediated endocytosis of selected cargo proteins. Can bind and assemble clathrin, and binds simultaneously to phosphatidylinositol 4,5-bisphosphate (PtdIns(4,5)P₂) and cargos containing non-phosphorylated NPXY internalization motifs, such as the LDL receptor, to recruit them to clathrin-coated pits. Can function in clathrin-mediated endocytosis independently of the AP-2 complex. Involved in endocytosis of integrin beta-1; this function seems to be redundant with the AP-2 complex and seems to require DAB2 binding to endocytosis accessory EH domain-containing proteins such as EPS15, EPS15L1 and ITSN1. Involved in endocytosis of cystic fibrosis transmembrane conductance regulator/CFTR. Isoform p96 is involved in endocytosis of megalin/LRP2 lipoprotein receptor during embryonal development. Required for recycling of the TGF-beta receptor. Isoform p67 is not involved in LDL receptor endocytosis. Involved in CFTR trafficking to the late endosome. Involved in several receptor-mediated signaling pathways. Involved in TGF-beta receptor signaling and facilitates phosphorylation of the signal transducer SMAD2. Mediates TGF-beta-stimulated JNK activation. May inhibit the canonical Wnt/beta-catenin signaling pathway by stabilizing the beta-catenin destruction complex through a competing association with axin preventing its dephosphorylation through protein phosphatase 1 (PP1). Sequesters LRP6 towards clathrin-mediated endocytosis, leading to inhibition of Wnt/beta-catenin signaling. May activate non-canonical Wnt signaling. In cell surface growth factor/Ras signaling pathways proposed to inhibit ERK activation by interrupting the binding of GRB2 to SOS1 and to inhibit SRC by preventing its activating phosphorylation at 'Tyr-419'. Proposed to be involved in modulation of androgen receptor (AR) signaling mediated by SRC activation; seems to compete with AR for interaction with SRC. Plays a role in the CSF-1 signal transduction pathway. Plays a role in cellular differentiation. Involved in cell positioning and formation of visceral endoderm (VE) during embryogenesis and proposed to be required in the VE to respond to Nodal signaling coming from the epiblast. Required for the epithelial to mesenchymal transition, a process necessary for proper embryonic development. May be involved in myeloid cell differentiation and can induce macrophage adhesion and spreading. Isoform p67 may be involved in transcriptional regulation. May act as a tumor suppressor. [UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (3) lacks an alternate in-frame exon compared to variant 1. The resulting isoform (b) has the same N- and C-termini but is shorter compared to isoform a. Variants 2 and 3 both encode isoform b. Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.