

Product datasheet for **MC221495**

Dact1 (NM_021532) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dact1 (NM_021532) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Dact1
Synonyms:	4921528D17Rik; AI115603; DAPPER; DAPPER1; Frd1; FRODO; Frodo1; MDpr1; MTNG3; THYEX3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

Fully Sequenced ORF: >MC221495 representing NM_021532
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGCCGGACGACGCGCGAGCCGGAGCCGCTGAGCCCCGGCCGGGGCGCGGAGGCCGAGGGGCGCT
 GGCAGCGAGAGGGGCGAGGCGGACACGGAGCGGCAGCGTACCCGCGAGCGCCAGGAGGCCACGCTGGCGGG
 GCTGGCGGAGCTGGGGTACCTGCGGCAACGCCAAGAGCTGCTGGTGCGCGGTGCGCTGCGCTGCTCCGGG
 ACCGTGGGGACCGTCGCGCCGCGCTCCGGGGAGCTGCGGGGAGACGCGGCGCAGCGCAGCCGCTGGAGG
 AGAAGTTCCTGGAAGAGAACATCTTGCTGCTGCGAAGGCAGTTGAATTGTTTGAGGAGAAGAGATGCCGG
 TTTGTTGAATCAGTTGCAAGAATTGACAAGCAGATAAGTGACCTGAGACTGGATGTGGAGAAGACATCT
 GAAGAGCACCTGGAGACAGACAGCCGGCTAGCTCAGGGTTTTATGAGCTGAGTGATGGAGCTTCGGGCT
 CCCTCTCTAACTCCTCAACTCCGTGTTCACTGAGTGTTGTCCAGTTGCCATTCAGCACCTGCTTCTG
 CAGCCCCCTTGAGGCGGCCCTTGACCATCTCAGACGGTTGCCCAAATCTGCAGATGTGAATCCTAAATAC
 CAGTGTGATCTTGCTGCTAAAAACGGGAATGACGTATATCGCTACCCAGTCCACTTCATGCTGTGGCTG
 TGCAGAGCCCAATGTTTCTCCTTTGCTGACGGGCAACACTCTGAGGGAAGAGGAGGGGCTTGGGAGCCA
 TGCCAGCGACATCTGCATTGGATCTGAACCTGAACGCCACCAAAACAGACAATTCCTGCCATCTCCAAGC
 AGTTTGTGGTCCGCTTCCCATCTGCATCCAGTAAGAAAATGGATGGGTATATTTTGAGCCTCGTGAGAG
 AGAAAACACACCTGTAAAGACCAATAACCTAGAACCAGTGTGAACGCTGACCTACCAAGGGCCTTCT
 GAGGAATGGAAGTGTGTGTGTCAGGGCCCTAGTGGCGTCCCACCGGCAGTAGTGTGAACCTTAAAGAT
 ACAAACAGATGTGTTTCCCGCTGGGGGAATAACCTCTTTGAAAACGGGCCATTCTCCCTCCTAAGC
 AGAGTCCAAGACTCAAAGACAGACCAGTTAGAAAGCAAGAGTTGGCTCTGCCGAGAGCTGCTCGGC
 AGGCGCCGATGGAACCCCAAAGCAAGCATGTGCCCAAAGCCGCAAGGCAGCCTCTCAAGAGCTCACA
 AGGTGTCAAGCCGGGCTGGGGGAATCCATGAAGGAAAGCAATCAGGCCTCCGCTGTTTCTCTAAAAACA
 GTCCTGGCAGAGGCCCTGTCCGCCCGCAGAGAGCAAAGCCCTGCAGCTCCCGAAAAAGATGTGCGAGAA
 GAACAGCCTCCAGGCTGTGCCCGCCTGGACAGGCCGGCCTTGACTTCAAAGCGAGGGCTCATCTCAA
 AGCCTCGAGGAAGGGCATCTGGTAAAGCTCAGTTCATTCCGGGGCAGCAGGGCGGCCAGGCCTCACC
 GTGCACACAGGAACCCGGGTGTCGCAAGGAGCGCCACCTGAAGGCCCGCGGCCAGGCAGCCATGGAACA
 CGGCTGCCACCGTCAAGGAGAAACCGGGCAGCAGGCAAGAAGTCCGTTTCCAGACGACTCGGAT
 ACAATAAGAAATTCAGGAAGACCTCCGCCAAGGCCGCGCAGTGGCGGCTGCAGGACGCTGGCCTTC
 CCGGTAGGGCCCTGGGCACCGCGGCCATCGGGCGGGTAGCAGGGCGCACGCGCATGGCCGGGAGCCCGT
 GGTGGCCAAACCGAAGCAAGCAAGCAACCGACTACCGCGGGTGGAAATCGTCAGCCGAGGTCTCTACGAA
 GAAGCCCTGCGGAGGGCCCGGAGGGCTCGCAGGGAGCACGGGGCTGCCTACCGGGTGGTGTGCGCCTGC
 CTTACGCCAGCCCTATGCCTACGTGCCAGCGACTCCGAGTACTCGGGGAGTGGCAGTGCCTCTTCCA
 CTCCACGGTGGTGGACACCAGCGAGGACGAGCAGAGCAACTACACCACCAACTGCTTCGGCGACAGCGAG
 TCCAGCGTGAGCGAAGGGCAGTTCGTGGGCGAGAGCACCACCAGCGACTCAGAGGAGAGCGGGGTT
 TAATCTGGTCCCAGTTTGTCCAGACTCTCCGATTCAAACGGTACCGGCCAGACCTCCACACCCGCTCC
 CAAAAACCTTTGTCAAATCAAGCTTCGCACAACCTCAAGAAGAAGATCCTCCGTTTCCGCTCTGGC
 TCTTTGAAACTGATGACTACCGTT**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul
ACCN: NM_021532
Insert Size: 2337 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:	<ol style="list-style-type: none">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_021532.4 , NP_067507.2
RefSeq Size:	3650 bp
RefSeq ORF:	2337 bp
Locus ID:	59036
UniProt ID:	Q8R4A3
Cytogenetics:	12 C3

Gene Summary:

Involved in regulation of intracellular signaling pathways during development. Specifically thought to play a role in canonical and/or non-canonical Wnt signaling pathways through interaction with DSH (Dishevelled) family proteins. The activation/inhibition of Wnt signaling may depend on the phosphorylation status. Proposed to regulate the degradation of CTNNB1/beta-catenin, thereby modulating the transcriptional activation of target genes of the Wnt signaling pathway. Its function in stabilizing CTNNB1 may involve inhibition of GSK3B activity. Promotes the membrane localization of CTNNB1. The cytoplasmic form can induce DVL2 degradation via a lysosome-dependent mechanism; the function is inhibited by PKA-induced binding to 14-3-3 proteins, such as YWHAB (By similarity). Seems to be involved in morphogenesis at the primitive streak by regulating VANGL2 and DVL2; the function seems to be independent of canonical Wnt signaling and rather involves the non-canonical Wnt/planar cell polarity (PCP) pathway. The nuclear form may prevent the formation of LEF1:CTNNB1 complex and recruit HDAC1 to LEF1 at target gene promoters to repress transcription thus antagonizing Wnt signaling (By similarity). May be involved in positive regulation of fat cell differentiation. During neuronal differentiation may be involved in excitatory synapse organization, and dendrite formation and establishment of spines.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) uses an alternate in-frame splice site in the 3' coding region, compared to variant 1. This results in a shorter protein (isoform 2), compared to isoform 1. Sequence Note: This RefSeq record was created from genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.