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Product datasheet for MR226691

Dact1 (NM_001190466) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dact1 (NM_001190466) Mouse Tagged ORF Clone
Tag:	Myc-DDK
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 »

ORF Nucleotide Sequence:

>MR226691 representing NM_001190466
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGCCGGACGCAGCGCGCGAGCCGGAGCCGCTGAGCCCCGGCCGGGGCGCGGAGGCCGAGGGGCGCT
GGCGCGAGAGGGGCGAGGCGGACACGGAGCGGCAGCGTACCCGCGAGCGCCAGGAGGCCACGCTGGCGGG
GCTGGCGGAGCTGGGGTACCTGCGGCAACGCCAAGAGCTGCTGGTGCGCGGTGCGCTGCGCTGCTCCGGG
ACCGTGGGGACCGTCGCGCCGCGCTCCGGGGAGCTGCGGGGAGACGCGGCGCAGCGCAGCCGCCTGGAGG
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GAAGAGCACCTGGAGACAGACAGCCGGCCTAGCTCAGGGTTTTATGAGCTGAGTGATGGAGCTTCGGGCT
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CAGCCCCTTGGAGGCGGCCTTGACCATCTCAGACGGTTGCCCCAAATCTGCAGATCTCATAGGATGGTTG
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TTAATTCCCTTGATGTCATTGCAGATGTGAATCCTAAATACCAGTGTGATCTTGTGTCTAAAAACGGGAA
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AGCAGAGCAACTACACCACCAACTGCTTCGGCGACAGCGAGTCCAGCGTGAGCGAAGGCGACTTCGTGGG
CGAGAGCACCACCACCAGCGACTCAGAGGAGAGCGGGGGTTTAATCTGGTCCCAGTTTGTCCAGACTCTC
CCGATTCAAACGGTCACGGCCCCAGACCTCCACACCCGTCCCACAAAAACCTTTGTCAAAATCAAGGCTT
CGCACAACCTCAAGAAGAAGATCCTCCGTTTCCGCTCTGGCTCTTTGAAACTGATGACTACCGTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

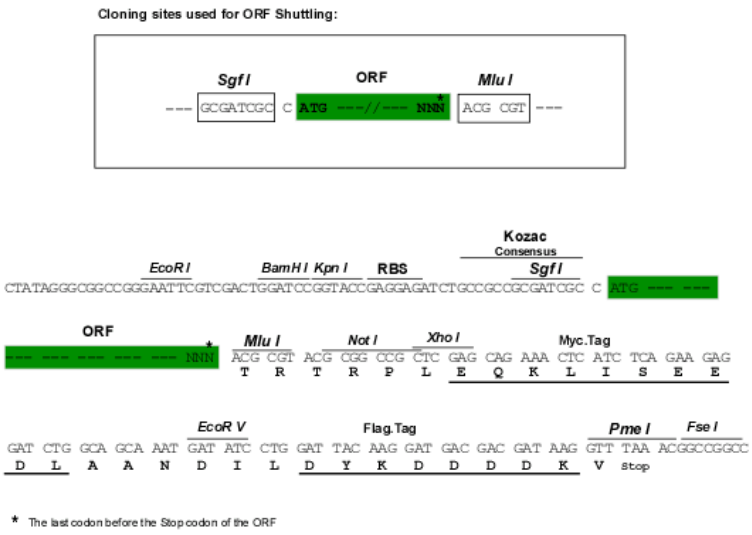
>MR226691 representing NM_001190466
Red=Cloning site Green=Tags(s)

MKPDAAREPEPLSPGRGAEAEGRWRERGEADTERQRTRERQEATLAGLAELGYLRQRQELLVRGALRCSG
TVGTVAPRSGELRGDAAQRSRLEEKFLEENILLLRRQLNCLRRRDAGLLNQLQELDKQISDLRLDVEKTS
EEHLETDSRPSSGFYELSDGASGSLSNSSNSVFSECLSSCHSSTCFCSPLEAALTISDGCPKSADLIGWL
ECKGGPCEDQASGTVCSSPSTPQFNSLDVIADVNPKYQCDLVSKNGNDVYRYPSPLHAVAVQSPMFLLCL
TGNTLREEEGLGSHASDICIGSELNATKTDNSLPSPSSLWSASHPASSKKMDGYILSLVQKKTHPVRTNK
PRTSVNADPTKGLLRNGSVCVRAPSGVPPGSSVNFKNTKQMCLPAGGITSLENGPFSPPKQRSKDSKTDQ
LESKRLALPESCSAGAAMEPQSKHVPKAAKAASQELTRCQAGLGESMKESNQASAVSPKTSPGRGPVAPA
ESKALQLPKKMSQKNSLQAVPALDRPALDFKSEGSSQSLEEGHLVKAQFIPGQQAAARPHRAHRNPGVAR
SATLKARGQAAMEHGLPTVREKPRAAGKKCRFPDDSDTNKKFRKTSAKGRRSGGLQDAGLPGRALGTGGH
RAGSRAHAHGREPVVAKPKHKRTDYRRWKSSAEVSYEEALRRARRARREHGAAYRVAVALPYASPYAYVP
SDSEYSAECESLFHSTVVDTSEDEQSNYTTNCFGDSESSVSEGDFVGESTTTSDSEESGGLIWSQFVQTL
PIQTVTAPDLHTRPTKTFVKIKASHNLKKKILRFRSGSLKLMTTV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001190466

ORF Size: 2445 bp

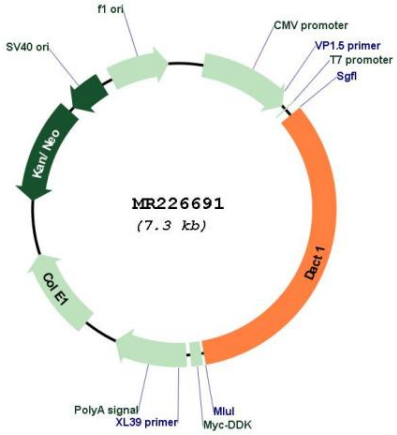
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001190466.1, NP_001177395.1
RefSeq Size:	3761 bp
RefSeq ORF:	2448 bp
Locus ID:	59036
Cytogenetics:	12 C3
MW:	88.6 kDa
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]

Product images:



Circular map for MR226691