

Product datasheet for **MG210495**

Dact2 (NM_172826) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dact2 (NM_172826) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dact2
Synonyms:	2900084M21Rik; A630024E20; dapper2; Dpr2; Frd2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG210495 representing NM_172826
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTGGGCACCGAGCGGCCAGGGGCCCGGGTTGGGACCGCCGAGGGTGGCGCGCGACTACGAGCCG
 CACTGGCCGGGCTGCAGGAGCTTCAGGGGCTGCGAGCCACGCAGCAAGCACGCGTGGGGGAGCTCTGGG
 CCTGCACCCTGCGCCAGGGCCCCGCGGCCAGGAGCTGCGTCTGGAGGCGCGCTGACCGCCTACGGGAG
 CAGCTGTACGGCTAAGGAGACAGGATGCTGGCCTGAAGACACACTTGGACCAGCTGGATCAGCAGATAA
 GTGAACTACAGCTGGATGTGAGCAGGTCTTCTTGGCAGGCCTTGGATAGTGACAGCAGACCCAGCTCAGG
 TTTCTATGAGCTGAGCGATGCTGGTTCCTGTTCTCTGTCCACCTCTGCGCATCTGTTTGCAGCGACCGT
 CTATCCCCCTCCCTGGTAGCTGGCTGCCTGTGTCCAGCCCTCAAGTCCAGGTCTGGCATCGGGGACT
 GGCAGCACGCTCTGCTGATGAGACCACTGTCCCTGCATGGAGCCACAGCTCACAGAAGATAGCAGGCT
 CCTGCATGGTGCAGAGGGCACAGGCCGGCTGACGGGCATGTTCCGGCCCAGACCAGTATCTACAGGTGAT
 CTCGAAAGAGTCCCTCCAGCTGACGTGGGGCTCCAGAGAGCTGGTACTGATGCTGCACATCTCTGGGCC
 AGGGGATAGAGATCCCAGCCCACGCCCTGGACCCACGTACCAGCGTGACCTGGTGGCCAGGGGAGGCCA
 GGAGGTGTACCCATATCCCAGCCCCCTCCATGCGGTGGCCCTGCAGAGTCCCCTCTTCGCTCTGCCAAA
 GAAGCCCCGTGTTTTGACATCTGCTCACCTCCCCAGGAGCCTCCTCTGGTCCCTGTTGATGAGAACAGGA
 CTCAACCTGAGCCGATCCGTGAGCTGGGCTCAGCCGAAGCCTACATCCACAGGCTGTTGCATCTGCGGGG
 CCAAGAGCTCCCCCTGAGAGATGTGGGGCAGGAGCAGGGAGGTGACACAGCTGCTTTCCACCGAAGCCC
 TGTGGCCAGAGGTGCGAGAGCACATGTCAGCTGGAGAAGCAGGCCCTGTGGAGCTGACAGGGGAGGACTGA
 AACTAGGTAGGGGTGCTGCCAAGGACAGCCTCAAGCAACATGGGCCCTGTGTCCCTTGTGGTGTGAGCC
 CCTCAGCAGCCCCCTAAAGGAAGAAACCATTCCTTGAATCCCTGTGTCCATGGAGACAATACTGTTGGT
 TCCTCACCTGCTCCCAGGCCAACAGCCTCTTAATGACTGTGGCCAAGGACCAGTCTGTACCATCCA
 GGGTGTGGGCACTGAGAGCCCACCTCTGGCCCCGAGGCCCTTTCCTATACATCCTGCACCACTGGTGA
 AACCTCTCCCGTGAAGCTGAGGATGGGCTTTTCCAAAACAAGGCCGTGAAGGTGAGAAGAAGAGTTAGT
 GAGAAAGTCCCGAGGCTAGGGAAGCAGCTCCCTCCACAACCAGAGAGGCAGCGGGTACAGAGCGGGACC
 CCTCCAGGCCCATCAGGGAGGTCTCAGCAGGAGGCCACACTGGCCCCGGGAGCCTCTGGACGCTCCTG
 CTCTGAGTCCACCCTCTACCCCGTGCCCTTCTTGTCCCCGTAGTGGTGGCCAGAGGGAAAGTTACCCA
 ACGTACCCCCAAGCGTTCTTCCCAATGGAGGCAGCTCTCCTCAGCTCAGCAGCCAGGCGGAAGCAGCGCA
 GGTGGCAGTCCACCATGGAGATCTCAGCCAAAGCCGGTTCAGTCAGCCAACCTGGGCCAGCATGGGGCT
 CCCTAGGTCCCCAGCCAAGAGAGGAAGTGGTCCCAGGGCCCAGAGTAGGCCACACTTGCCCGTCAGGAT
 GCCTGTGCGAGGTGTGAGTCGGACCCCTCGGAGCACTCTGCAGACTGCACCTCACTCTACCACTCCACCA
 TTGCCGAGACCAGCGAGGACGAGGAGGCGAGTGACCACACTGCCAACCGCTTTGGGGACGAGTCCAGCAG
 CAACGATTCAGAAGGGTGTTCGGGGCAGCCCGCTCGCCTGGCAATAGGCAGTGCAGAGGCTGGGCAA
 GGGGGTGGGCTGGCCTCGGGTGCCCCCAGCAGCCCTCACGGGCCCCAGGAAACACCAGGCCACCCT
 TGCCCCCTGTGCCAAACTGTGCCGATCAAGGCCTCAAGGCCCTGAAGAAGAAGATCCGAAGGTTTCA
 GCCAGCAGCCCTGAAGGTCATGACCATGGTG

AG**CGGACCC**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

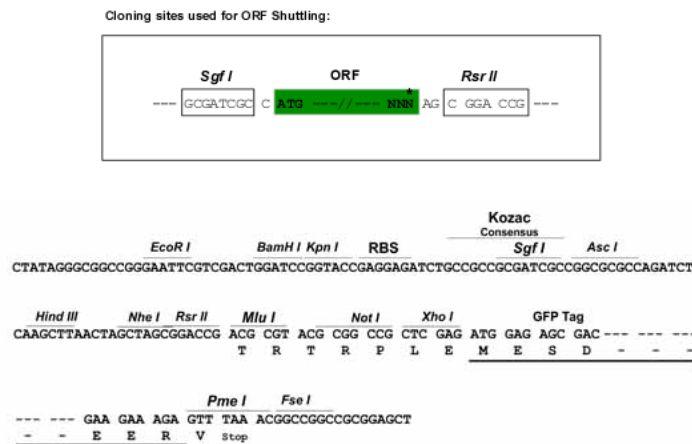
Protein Sequence: >MG210495 representing NM_172826
 Red=Cloning site Green=Tags(s)

```
MWAPSGQGPAGWDRRRVGARLRAALAGLQELQGLRATQQARVRGALGLHPAGPRGQELRLEAAL TALRE
QLSRLRRQDAGLKTHLDQLDQQISELQLDVSRSCEALDSRPSGGFYELSDAGCSLSTSCASVCSDR
LSPSLGSLWLPVFQPSKSRSGIGDWRPRSADETTVPAWSPQLTEDSRLHGAEGTGRITGMFRPRPVSTGD
LERVLPADVGLQRAGTDAHLLGQIEIPAHALDPTYQRDLVARGGQEVYPYPSPLHAVALQSPLFALPK
EAPCFDICSPPQEPPLVPVDENRTQPEPIRELGSAEAYIHRLLHLRGQELPLRDVGQEQGGDTAAFPKP
CGQRSESTCQLEKQACGADRGGKLGGAADSLKQHGVPVSLVGAEPLSSPLKEETIPWNPCVHGDNVTG
SSPCSQAQQLNDCGQGPVLSRVLGTESPLAPEPFAYTSCTTGETSPVKLRMGFSQNKAVKVRRRVS
EKVPRLGKQLPPQPERQVTERDPSRPHQGGLSRRPTLAREPPGRSCSESTLYVPVFLVPVVAQRESYP
TSPQAFFPMEAALLSSAARRKQRRWQSTMEISAKAGSVSQPGSMGLPRSPAKRSGPRAQSRPTLARQD
ACARCESDPSEHSADCTSLYHSTIAETSEDEEASDHTANRFGDESSNDSEGCFRGSRRLAIGSAEAGQ
GGAWPRVPPQP SRAPGNTRPPLPPVKLCRIKASKALKKKKIRRFQPAALKVMTMV
```

SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_172826

ORF Size: 2271 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_172826.3](#), [NP_766414.3](#)

RefSeq Size: 2849 bp

RefSeq ORF: 2274 bp

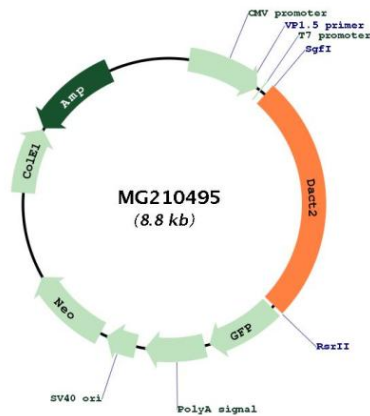
Locus ID: 240025

UniProt ID: [Q7TN08](#)

Cytogenetics: 17 A2

Gene Summary: Involved in regulation of intracellular signaling pathways during development. Negatively regulates the Nodal signaling pathway, possibly by promoting the lysosomal degradation of Nodal receptors, such as TGFBR1. May be involved in control of the morphogenetic behavior of kidney ureteric bud cells by keeping cells epithelial and restraining their mesenchymal character. May play an inhibitory role in the re-epithelialization of skin wounds by attenuating TGF-beta signaling.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG210495