

Product datasheet for **MG222698**

Dpp4 (NM_001159543) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dpp4 (NM_001159543) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dpp4
Synonyms:	Cd26; Dpp-4; THAM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG222698 representing NM_001159543
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGACACCGTGAAGGTTCTTCTGGGACTGCTTGGTGTGCGCTGCGCTTGTACCATCATCACCGTGC
CAATAGTTCTGCTGAGCAAAGATGAAGCGCAGCTGACAGCCGAGAACGATTCACTAGCTGACTATTT
AAAGAGTACCTTTTCGGGTCAAGTCTACTCTTTGTGGTGGGTTTCAGACTTTGAATACCTCTACAAACAA
GAGAACAATATCTTGCTGCTCAATGCTGAACATGGAAACAGCTCCATTTTCTGGAGAACAGTACCTTTG
AAAGCTTTGGATATCATTCAAGTGTACCTGACCGACTGTTTGTCTCTTGGAAATACAACACTACGTGAAGCA
ATGGAGACATTCACACAGCTTCATACAACATTTATGATGTGAATAAAAGACAGCTGATCACAGAAGAG
AAGATCCAAATAATACACAGTGGATCACATGGTCACCAGAAGGTATAAGTTGGCATATGTCTGGAAGA
ATGATATTTACGTTAAAGTTGAACCACACTTACCTAGTCATAGGATCACATCGACAGGAGAAGAAAATGT
AATATATAATGGAATAACTGACTGGGTTTATGAAGAGGAAGTCTTCGGTGCCTACTCTGCACTGTGGTGG
TCTCCAAACAACAGCTTTCTAGCTTATGCCAGTTTAAACGACACAGGAGTGCCGCTCATTGAATACTCCT
TCTATTCTGATGAGTCACTGCAGTACCCAAAGACAGTGTGGATCCATACCCAAAGGCAGGAGCTGTGAA
TCCAACGTAAAGTTCTTTATTGTAATAATAGACTCTCTCAGCTCATCCTCTAGTGCGGCTCCCATCCAA
ATCCCTGCTCCTGCATCTGTGGCAAGAGGGGATCACTATTTATGTGATGTGGTGTGGGCTACAGAAGAAA
GAATTTCACTACAGTGGCTCAGGAGGATTCAGAACTATCCGTGATGGCTATCTGTGACTATGATAAGAT
CAACCTAACGTGGAACGTCCATCCGAGCAGCAGCATGTTGAAATGAGTACCACAGGCTGGGTCGGAAGA
TTTAGGCCCGCAGAACCTCACTTCACTCTGATGGAAGCAGCTTCTATAAGATCATCAGCGACAAGATG
GCTACAAACACATCTGCCACTTCCCGAAAGATAAGAAAGACTGTACATTTATTACAAAAGGAGCCTGGGA
AGTCATTAGTATCGAAGCTCTGACCAGGATTATCTATACTACATTAGTAACCAATATAAAGAAATGCCA
GGAGGAAGAAATCTCTATAAAAATTCAACTTACTGACCACACAAATGTGAAGTGCCTTAGTTGTGACCTGA
ATCCAGAAAGATGTCAGTATTATGCGGTATCATTTAGTAAAGAGGCAAAGTACTATCAGCTGGGATGTTG
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TGTA AAAATGGGATTTGTGGATAGCAAGCGAGTTGCAATTTGGGGCTGGT CATATGGAGGTATGTAAAC
TCAATGGTCTGGGATCGGGAAGTGGCGTGTTC AAGTGC GGAATAGCTGTGGCACCTGTGTACGGTGGG
AGTACTATGACTCAGTGTACACAGAGCGTTACATGGGTCTCCCAATTCAGAAAGACAACCTTGACCATTA
CAGGAAC TCAACAGT CATGAGCAGAGCTGAACATTTTAAACAAGTTGAGTACCTCCTTATTCATGGAACG
GCAGATGATAATGTTCACTTT CAGCAGT CAGCTCAGATCTCCAAGCCCTGGTGGATGCTGGTGTGGATT
TCCAAGCAATGGTATAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG222698 representing NM_001159543
 Red=Cloning site Green=Tags(s)

MKTPWKVLLGLLGVAALVTIITVPIVLLSKDEAAADSRRTYSLADYLKSTFRVKSYSYLWWVSDFEYLYKQ
 ENNILLNAEHGNSIFLENSTFESFGYHSVSPDRLFVLLLEYNYVKQRHSYTASYNIYDVNKRQLITEE
 KIPNNTQWITWSPEGHKLAYVWKNDIYVKVEPHLPSHRITSTGEENVIYNGITDWVYEEVEFGAYSALWW
 SPNNTFLAYAQFNDTGVPLIEYSFYSDLSLQYPKTVWIPYKAGAVNPTVKFFIVNIDSLSSSSSAPIQ
 IPAPASVARGDHYLCDVVWATEERISLQWLRIQNYSVMAICDYDKINLTWNCPEQQHVEMSTTGWVGR
 FRPAEPHFTSDGSSFYKIIISDKDGYKHICHFPKDKDCTFITKGAWEVISIEALTSDYLYYISNQYKEMP
 GGRNLYKIQLTDHTNVKCLSCDLNPERCQYYAVSFKEAKYYQLGCWGPGLPLYTLHRSTDHKLRLVLED
 NSALDRMLQDVQMPKSKLDFIVLNETRFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADASFRNLWATY
 LASTENIIVASFDRGSGYQGDKIMHAINRRLGTLEVEDQIEAARQFVKMGFVDSKRVAIWGWSYGGYVT
 SMVLGSGSGVFKCGI AVAPVSRWEYDVS YTERYMG LIPEDNLDHYRNSTVMSRAEHFKQVEYLLIHGT
 ADDNVHFQQSAQISKALVDAGVDFQAMVY

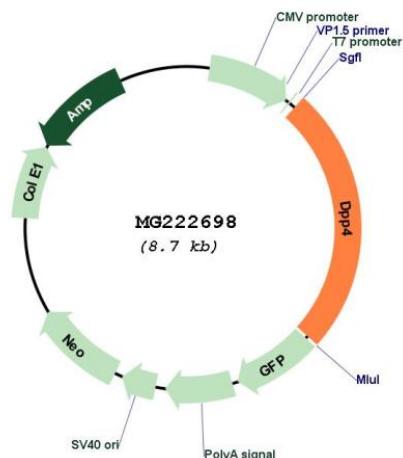
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_001159543

ORF Size: 2187 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_001159543.1](#), [NP_001153015.1](#)

RefSeq Size: 3654 bp

RefSeq ORF: 2190 bp

Locus ID: 13482

UniProt ID: [P28843](#)

Cytogenetics: 2 35.85 cM

Gene Summary: Cell surface glycoprotein receptor involved in the costimulatory signal essential for T-cell receptor (TCR)-mediated T-cell activation. Acts as a positive regulator of T-cell coactivation, by binding at least ADA, CAV1, IGF2R, and PTPRC. Its binding to CAV1 and CARD11 induces T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent manner. Its interaction with ADA also regulates lymphocyte-epithelial cell adhesion. In association with FAP is involved in the pericellular proteolysis of the extracellular matrix (ECM), the migration and invasion of endothelial cells into the ECM. May be involved in the promotion of lymphatic endothelial cells adhesion, migration and tube formation. When overexpressed, enhanced cell proliferation, a process inhibited by GPC3. Acts also as a serine exopeptidase with a dipeptidyl peptidase activity that regulates various physiological processes by cleaving peptides in the circulation, including many chemokines, mitogenic growth factors, neuropeptides and peptide hormones. Removes N-terminal dipeptides sequentially from polypeptides having unsubstituted N-termini provided that the penultimate residue is proline. [UniProtKB/Swiss-Prot Function]