

Product datasheet for **MG224702**

Dspp (NM_010080) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dspp (NM_010080) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dspp
Synonyms:	D; Dmp; Dmp2; Dmp3; Dpp; Dsp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG224702 representing NM_010080, codon optimized . Due to the complexity of NM_010080, the ORF clone is codon optimized for mammalian Expression. The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAAATGAAAATCATTATCTATATTTGTATCTGGGCAACCGCTTGGGCGATCCCGGTCCCCAGCTTG
TACCCCTGGAGCGCGACATTGTGCGAAAACCTCCGTGGCCGTACCACTTCTGACCCACCCAGGAACGGCCG
ACAGAATGAGCTTTCCATAAAATCCACCACTAGCAATAGCAACGATTCCCAGATGGTAGTGAGATTGGT
GAACAGGTACTTTCCGAGGACGGCTACAAGAGGGACGAAACGGATCTGAGTCCATACACGTGGGGGGTA
AGGACTTTCCAACCCAGCCTATCCTGGTGAATGAACAGGGGAATACGGCAGAAGAACAACGATATTGA
GACGTATGGGCATGACGGAGTCCACGCTCGCGGCGAGAATCCACAGCGAACGGTATACGGTCCCAGGTC
GGAATTGTTGAGAATGCTGAAGAAGCCGAATCCTCCGTGCATGGGCAGGCAGGTCAAACACCAAAAAGCG
GAGGACTAGTGATGTATCCCAGAACGGAGACGCAACGTTGTTTCAGGAGAACGAACCCAGAGGCCAG
CATAAAGAATTCACAAACCCAGAGGCTGGGATCCACGGAAGCGGTGTCGCAACACAGACTACGCCCC
CAGCGCGAAGGACTTGGGTCTGAGAATCAGGGGACTGAGGTTACCCCAAGTATCGGCGAGGACGCGGGTC
TGGATGATACCGATGGGAGCCCTTCCGGCAACGGGGTGGAGGAGGATGAAGATACGGGCTCTGGCGATGG
GGAGGGTGCCGAAGCGGGCGACGGAAGGGAATCTCACGACGGCACTAAAGCCAAGGTGGGCAGTCCCAC
GGGGGCAATACCGATCACCGCGGGCAGAGTAGTGTATCTACTGAGGATGACGACTCTAAAGAGCAGGAGG
GTTTCCCGAATGGGCATAACGGCGACAATAGTCCGAGGAGAATGGGGTGGAGGAAGGGGATAGCACTCA
GGCCACCAAGATAACCAAAAAGCTGAGTCCCAAGATACTCGAGATGCCGAGGGGGGATCATCAGTCAG
AGCGAAGCCTGTCGGTCTGGGAAATCTCAGGATCAAGGCATTGAGACAGAGGGTCCGAATAAGGGCAACA



View online »

```

AGAGCATTATTACCAAAGAAAGTGGCAAGCTCTCCGGAAGTAAAGATAGCAATGGCCATCAGGGCGTTGA
GCTGGACAAACGCAACAGCCCTAAGCAGGGGAGTCCGACAAACCGCAGGGGACC CGGAAAAGTCAGCT
GCTCACAGCAATCTCGGCCACAGCAGGATAGGATCAAGCTCAAATAGTGATGGGCACGATTCCTATGAAT
TCGACGACGAGTCTATGCAGGGGACGATCCTAAATCATCCGATGAAAGTAAACGGCAGCGACGAATCCGA
CACTAACAGTGAATCAGCCAACGAGAGCGGATCTAGAGGGGACGCTTCATACACTCCGATGAATCATCT
GACGACGATAACGATTCTGATAGTCATGCTGGCGAAGATGATTCATCTGATGATTCCAGCGACACTGACG
ATAGCAGCTCCAACGGGGACGGGACAGCGATAGTAACGGGGACGGAGACAGCGAGAGCGAAGATAAGGA
TGAGTCCGATTCATCCGACCATGACAACTCCAGTGATAGTGAGTCCAAGTCCGACTCTCCGATTCCAGC
GACGATAGCTCAGATTCTCCGACTCCTCTGATAGTAGCGATTCTCTGACTCCTCAGATAGCTCTGACA
GCAGCGACTCCAGTGACAGCTCCGATTCTAACAGCTCCAGCGACTCCTCCGACAGCAGTTCCTCAAGTGA
TTCATCTGATTCTCAGATAGCAGTGACAGCTCTGATAGCTCAGACAGCTCTGATAGCAGCGACTCTAGC
GATTCCAGCGATTCTGACAGTAGTGACTCCAGCGACTCATCCGACAGTAGTGACTCCTCCAGCTCAT
CAGACTCATCTGATTCCAGTAGTCTTCAGATTCTCCGACAGTAGCGATAGCTCCGATTCTAGTGACTC
CTCCGACTCCAGCGACTCCAGTTCAGTGACAGCAGTAGCAGCTCCAATAGTAGCGACTCCAGTGACTCC
AGTGACTCCTCATCAAGCAGCGACTCTTCCAATTCATCCGACTCTCCGACAGTTCAGATAGTAGCGATT
CCTCCGACTCCTCAGACAGCTCCAATTCTAGCGATAGTTCGATTCTCCAGCAGCTCTGACTCCTCAGA
TTCTCTTCTCCTCCGATTCTCCGATAGTAGTGATAGTTCTGACAGCTCCGAGTCTCTGAGAGTAGT
GATTCTTCTAATAGCAGCGACTCCAGTGACTCTCCGATTCTTCTGATTCAAGCGATTCTAGCGACAGTA
GCGACTCTAGCGACTCCAGCGACAGTTCAAACAGTTCGACAGTAGCGATAGCAGCGACTCTCCGATAG
CAGTGACTCTAGTAACTCTCAGACTCAAGTGATAGTTCTGACTCAAGCGATTCAAGCGACAGTTCAGAT
AGCTCTGATAGTTCTGACTCCAGTGATAGTAGCGACTCATCCGACAGCTCTGATTCTGATAGCTCCG
ACTCTCCGATAGTTCTCAGACAGTAGCGATAGTAGCGACTCAAGCGACAGCAGCGATTCTCCGACTCCTC
AGATAGTAGCAACAGTTCGACTCTTCTGACAGCGATTCCAAGGATTCTCTAGTGATTCTCTGACGGG
GACAGTAAAAGTGGCAATGGCAACAGCGATTCCAATAGTGACTCAAATCCGACTCTGACTCCGACAGCG
AGGGGAGCGACTCTAATCACAGCACGTCCGACGAC

```

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG224702 representing NM_010080
 Red=Cloning site Green=Tags(s)

```

MKMKIIIIYICIWATAWAIPVPLVPLERDIVENSVAVPLLTGPTAAQNELSINSTSNSNDSPDGSEIG
EQVLSSEGYKRDGNGSESIHVGGKDFPTQPILVNEQGNTAEHNDIETYGHGVDHARGENSTANGIRSQV
GIVENAEAESESVHGQAGQNTKSGGASDVSNQGDATLVQENEPPEASIKNSTNHEAGIHGSGVATHETTP
QREGLGSENGTEVTPSIGEDAGLDDTDGSPSGNGVEEDEDTGSGDGEGAEAGDGRESHDGTKGQGGQSH
GGNTDHRGQSSVSTEDDDSKKEQEGFPNGHNGDNSSEENGVEEGDSTQATQDNQKLSPKDTRDAEGGIIISQ
SEACPSGKSQDQGIETEGPNKGNKSIITKESGKLSGSKDSNGHQVELDKRNSPKQGESDKPQGTAEKSA
AHSNLGHSRIGSSNSDGHDSYEFDDDSMQGDDPKSSDESNGSDESNTNSESANESGSRGDASYTSDESS
DDDNDSDSHAGEDDSSDSDSDTDDSDSNGDGDSDSNGDGDSESEDKDESDDHDNSDSESKSDSSDSS
DDSSDSDSSDSDSSDSDSDSDSDSDSDSDSSDSSDSSDSSDSSDSSDSSDSSDSSDSSDSSDSSDSS
DSSDSDSSDSDSDSDSDSDSDSSDSSDSSDSSDSDSDSDSDSDSDSDSSDSSDSSDSSDSSDSSDSSD
SDSSSSDSSNSDSDSDSDSDSDSDSDSDSDSSNSDSDSDSSDSSDSSDSSDSSDSDSDSDSDSDSESESS
DSSNSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSSNSDSDSDSDSDSDSDSDSDSDSDSD
SSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSD
DSKSGNGNSDNSNSDSDSDSDSEGSNSHSTSD

```

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



Plasmid Map:



ACCN: NM_010080

ORF Size: 2835 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:	<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_010080.2
RefSeq Size:	4440 bp
RefSeq ORF:	2838 bp
Locus ID:	666279
Cytogenetics:	5 50.59 cM
Gene Summary:	<p>This gene encodes a member of the small integrin-binding ligand N-linked glycoprotein (SIBLING) family of proteins. The encoded preproprotein is secreted by odontoblasts and proteolytically processed to generate two principal proteins of the dentin extracellular matrix of the tooth, dentin sialoprotein and dentin phosphoprotein. These two protein products may play distinct but related roles in dentin mineralization. Mice lacking the encoded protein exhibit hypomineralization defects in dentin, similar to human dentinogenesis imperfecta. [provided by RefSeq, Feb 2016]</p>