

Product datasheet for **RG223225**

Thrombospondin 2 (THBS2) (NM_003247) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Thrombospondin 2 (THBS2) (NM_003247) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Thrombospondin 2
Synonyms:	TSP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG223225 representing NM_003247 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTCTGGAGGCTGGTCTGCTGGCTCTGTGGGTGTGGCCAGCACGCAAGCTGGTCACCAGGACAAAG
ACACGACCTTCGACCTTTTCAGTATCAGCAACATCAACCGCAAGACCATTGGCGCCAAGCAGTTCGCGG
GCCCGACCCCGCGTGGCGGCTTACCGCTTCGTGCGCTTTGACTACATCCACCGGTGAACGAGATGAC
CTCAGCAAGATCACCAAGATCATGCGGCAGAAGGAGGGCTTCTTCTCACGGCCAGCTCAAGCAGGACG
GCAAGTCCAGGGCAGCTGTTGGCTCTGGAGGGCCCGTCTCTCCAGAGGCAGTTCGAGATCGTCTC
CAACGGCCCCGCGACACGCTGGATCTACCTACTGGATTGACGGCACCCGGCATGTGGTCTCCCTGGAG
GACGTCGGCCTGGCTGACTCGCAGTGGAAGAAGCTCACCGTGCAGGTGGCTGGCGAGACCTACAGCTTGC
ACGTGGGCTGCGACCTCATAGACAGCTTCGCTCTGGACGAGCCCTTCTACGAGCACCTGCAGGCGGAAAA
GAGCCGGATGTACGTGGCCAAAGGCTCTGCCAGAGAGAGTCACTTCAGGGGTTTGCTTCAGAACGTCCAC
CTAGTGTTTGAAAACCTGTGGAAGATATTCTAAGCAAGAAGGGTTGCCAGCAAGGCCAGGGAGCTGAGA
TCAACGCCATCAGTGAGAACACAGAGACGCTGCGCCTGGTCCGCATGTACCACCGAGTACGTGGGCCC
CAGCTCGGAGAGGAGGCCGAGGTGTGCGAACGCTCGTGCAGGAGCTGGGAAACATGGTCCAGGAGCTC
TCGGGGCTCCACGCTCTCGTGAACCAGCTCAGCGAGAACCTCAAGAGAGTGTGCAATGATAACCAAGTTTC
TCTGGGAGCTCATTGGTGGCCCTCCTAAGACAAGGAACATGTACGCTTGCTGGCAGGATGGCCGGTTCTT
TGCGGAAAATGAAACGTGGGTGGTGACAGCTGCACCACGTGTACCTGCAAGAAATTTAAAAACATTTGC
CACCAAATCACCTGCCCGCTGCAACCTGCGCCAGTCCATCCTTTGTGGAAGGCGAATGCTGCCCTTCT
GCCTCCACTCGGTGGACGGTGGAGAGGGCTGGTCTCCGTGGCAGAGTGGACCCAGTGTCCGTGACGTG
TGGCTCTGGGACCCAGCAGAGAGGCCGGTCTGTGACGTACCAGCAACACCTGCTTGGGGCCCTCCATC
CAGACACGGGCTTGCACTGAGCAAGTGTGACACCCGCATCCGGCAGGACGGCGCTGGAGCCACTGGT
CACCTTGGTCTTCATGCTCTGTGACCTGTGGAGTTGGCAATATCACACGCATCCGTCTCTGCAACTCCCC
AGTGCCCCAGATGGGGGCAAGAATTGCAAAGGGAGTGGCCGGGAGACCAAGCCTGCCAGGGCGCCCCA



[View online »](#)

TGCCAATCGATGGCCGCTGGAGCCCCTGGTCCCCGTGGTCGGCCTGCACTGTACCTGTGCCGGTGGGA
TCCGGGAGCGCACCCGGGTCTGCAACAGCCCTGAGCCTCAGTACGGAGGGAAGGCCCTGCGTGGGGATGT
GCAGGAGCGTCAGATGTGCAACAAGAGGAGCTGCCCGTGGATGGCTGTTTATCCAACCCCTGCTTCCC
GGAGCCCAGTGCAGCAGCTTCCCGATGGTCTGGTTCATGCGGCTCCTGCCCTGTGGGCTTCTTGGGCA
ATGGCACCCACTGTGAGGACCTGGACGAGTGTGCCCTGGTCCCGACATCTGCTTCTCCACCAGCAAGGT
GCCTCGCTGTGTCAACACTCAGCCTGGCTTCCACTGCCCTGCCCTGCCCGCCCGATACAGAGGGAACCCAG
CCCGTCGGGGTCGGCCTGGAAGCAGCCAAGACGGAAAAGCAAGTGTGTGAGCCCGAAAACCCATGCAAGG
ACAAGACACACAAGTCCACAAGCACGCGGAGTGCATCTACCTGGGCCACTTCAGCGACCCCATGTACAA
GTGCGAGTGCCAGACAGGCTACGCGGGCAGCGGCTCATCTGCGGGGAGGACTCGGACCTGGACGGCTGG
CCCAACCTCAATCTGGTCTGCGCCACCAACGCCACCTACCACTGCATCAAGGATAACTGCCCCCATCTGC
CAAATTCTGGGCAGGAAGACTTTGACAAGGACGGGATTGGCGATGCCTGTGATGATGACGATGACAAATGA
CGGTGTGACCGATGAGAAGGACAAGTCCAGCTCCTCTTCAATCCCGCCAGGCTGACTATGACAAGGAT
GAGGTTGGGGACCGCTGTGACAAGTCCCTTACGTGCACAACCCCTGCCAGATCGACACAGACAACAATG
GAGAGGGTACGCTGCTCCGTGGACATTGATGGGACGATGTCTTCAATGAACGAGACAATTGTCCCTA
CGTCTACAACACTGACCAGAGGGACACGGATGGTACGGTGTGGGGGATCACTGTGACAAGTCCCGCTG
GTGCACAACCCCTGACCAGACCGAGTGGACAATGACCTTGTGGGGACCGTGTGACAACAACGAGGACA
TAGATGACGACGGCCACCAGAACAACAGGACAAGTCCCTACATCTCCAACGCCAACCCAGGCTGACCA
TGACAGAGACGGCCAGGGCGACGCTGTGACCCTGATGATGACAACGATGGCGTCCCGATGACAGGGAC
AACTGCCGGCTTGTGTTCAACCCAGACCAGGAGGACTTGGACGGTGTGACGGGGTGTATTTGTAAG
ATGATTTTGACAATGACAACATCCAGATATTGATGATGTGTCTGAAACAATGCCATCAGTGAGAC
AGACTTCAGGAACCTCCAGATGGTCCCCTGGATCCCAAGGGACCACCCAAATTGATCCCAACTGGGTC
ATTCGCCATCAAGGCAAGGAGCTGGTTCAGACAGCCAACCTCGACCCCGCATCGCTGTAGGTTTTGACG
AGTTTGGTCTGTGGACTTCAGTGGCATTCTACGTAACACTGACCGGGACGACGACTATGCCGGCTT
CGTCTTTGGTTACCAGTCAAGCAGCCGCTTCTATGTGGTGTGGAAGCAGGTGACGCAGACCTACTGG
GAGGACCAGCCACGCGGCCTATGGCTACTCCGGCGTGTCCCTCAAGGTGGTGAACCTCCACCACGGGGA
CGGGCAGCACCTGAGGAACGCGCTGTGGCACACGGGAAACGCGCGGGCAGGTGCGAACCTTATGGCA
CGACCCAGGAACATTGGCTGGAAGGACTACACGGCCTATAGGTGGCACCTGACTCACAGGCCAAAGACT
GGCTACATCAGAGTCTTAGTGATGAAGGAAAACAGGTGATGGCAGACTCAGGACCTATCTATGACCAA
CCTACGCTGGCGGGCGGCTGGTCTATTTGTCTTCTCAAGAAATGGTCTATTTCTCAGACCTCAAGTA
CGAATGCAGAGATATT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG223225 representing NM_003247
 Red=Cloning site Green=Tags(s)

```

MVWRLVLLALWVWPSTQAGHQDKDTTFDLFSISINRKTIGAKQFRGPDGPVPAYRFVRFDYIPPNADD
LSKITKIMRQKEGFFLTAQLKQDGKSRGTLLEALEGPLSQRQFEIVSNGPADTLDLTYWIDGTRHVVSLE
DVGLADSQWKNVTVQVAGETYSLVHGCDLIDSFALDEPFYEHLQAEKSRMYVAKGSARESHFRGLLQNVH
LVFENSVEDILSKKGCQQGQGAENAISENTETLRLGPHVTTEYVGPSSERRPEVCERSCEELGNMVQEL
SGLHVLVNQLSENLRVSNQFLWELIGPPKTRNMSACWQDGRFFAENETWVVDSCCTTCTCKKFTIC
HQITCPPATCASPSFVEGECCPSCLHSDVGEWSPWAEWTQCSVTCGSGTQQRGRSCDVTSTNTCLGPSI
QTRACSLSKCDTRIRQDGGWSHSPWSSCSVTCGVGNITRIRLNCNPVPMGGKNCCKGSGRETKACQGAP
CPIDGRWSPWSPSACTVTCAGGIRERTRVCNSPEPQYGGKACVGDVQERQMCNKRSCPVDGCLSNPCFP
GAQCSSFPDGSWSCGSPVGFNGTHCEDLDECALVPDICFSTSKVPRCVNTQPGFHCLPCPPRYRGNQ
PVGVGLEAAKTEKQVCEPENPCKDKTHNCHKHAECIYLGHFSDPMYKCECQTYAGDGLICGEDSDLGWDG
PNLNLVCAATNATYHCIKDNCPHLPNSGQEDFDKDGIGDACDDDDNDGVTDEKDCQLLFPNRQADYDKD
EVGDRCDNCPYVHNPQIDTDNNGEGDACSVDIDGDDVFNERDNCYVYNTDQRDTDGDGVDHCDNCPL
VHNPDQTDVDNDLVGDQCDNNEIDDDGHQNNQDNCPIYISNANQADHHRDQGDACDPDDNDGVPDDR
NCRLVFNPQEDLDGDGRDICKDDFDNDNIPDIDDVCPENNAISETDFRNFQMVPLDPKGTQIDPNWV
IRHQGKELVQTANSDPGIAVGFDEFGSVDFSGTFYVNTDRDDYAGVFVGYQSSSRFYVVMWKQVTQTYW
EDQPTRAYGYSVSLKVVNSTTGTGEHLRNALWHTGNTPGQVRTLWHDPRNIGWKDYAYRWHLTHRPKT
GYIRVLVHEGQVMADSGPIYDQTYAGGRLGLFVFSQEMVYFSDLKYECRDI
  
```

TRTRPLE - GFP Tag - V

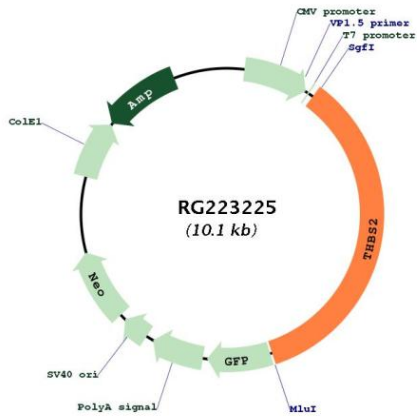
Restriction Sites: SgfI-MluI
Cloning Scheme:



ACCN: NM_003247
ORF Size: 3516 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_003247.5
RefSeq Size:	5826 bp
RefSeq ORF:	3519 bp
Locus ID:	7058
UniProt ID:	P35442
Cytogenetics:	6q27
Domains:	tsp_1, VWC, EGF_CA, TSPN, tsp_3, EGF, EGF
Protein Families:	Druggable Genome
Protein Pathways:	ECM-receptor interaction, Focal adhesion, TGF-beta signaling pathway
Gene Summary:	The protein encoded by this gene belongs to the thrombospondin family. It is a disulfide-linked homotrimeric glycoprotein that mediates cell-to-cell and cell-to-matrix interactions. This protein has been shown to function as a potent inhibitor of tumor growth and angiogenesis. Studies of the mouse counterpart suggest that this protein may modulate the cell surface properties of mesenchymal cells and be involved in cell adhesion and migration. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG223225