

Product datasheet for **RG202337**

TWSG1 (NM_020648) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	TWSG1
Synonyms:	TSG
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG202337 representing NM_020648
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGTTACACTATGTTGCTGTGCTTACTCTAGCCATCCTGATGTTCTGACATGGCTTCCAGAATCAC
TGAGCTGTAACAAAGCACTCTGTGCTAGTGATGTGAGCAAAATGCCTCATTCAAGAGCTCTGCCAGTGCCG
GCCGGGAGAAGGCAATTGCTCCTGCTGTAAGGAGTGATGCTGTGCTTGGGGCCCTTTGGGACGAGTGC
TGTGACTGTGTTGGTATGTGTAATCCTCGAAATTATAGTGACACACCTCCAACCTCAAAGAGCACAGTGG
AGGAGCTGCATGAACCGATCCCTTCTCTCTCCGGGCACTCACAGAAGGAGATACTCAGTTGAATTGGAA
CATCGTTTCTTCCCTGTTGCAGAAGAACTTTCACATCATGAGAATCTGGTTTCATTTTAGAAACTGTG
AACCAGCCACACCACAGAATGTGTCTGTCCCCAGCAATAATGTTACGCGCCTTATTCCAGTGACAAAG
AACACATGTGACTGTGGTTTATTTTGATGACTGCATGTCCATACATCAGTGAAAAATCCTGTGAGTC
CATGGGAGCATCCAAATATCGCTGGTTTCATAATGCCTGCTGCGAGTGCATTGGTCCAGAATGTATTGAC
TATGGTAGTAAACTGTCAAATGTGAAGTGCATGTTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG202337 representing NM_020648
Red=Cloning site Green=Tags(s)

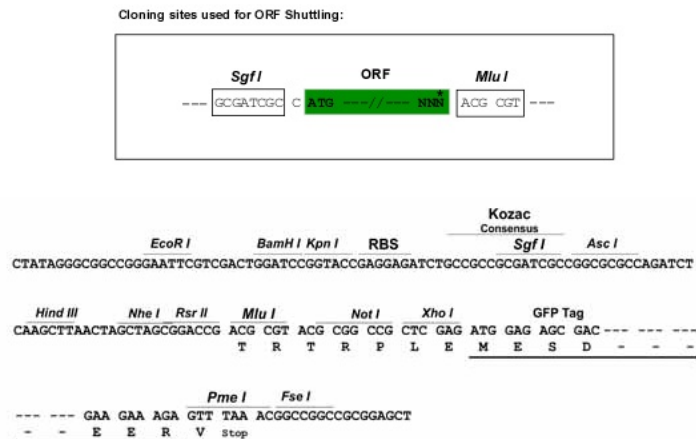
MKLHYVAVLTLAILMFLTWLPESLSCNKALCASDVSKCLIQELCQCRPGEGNCSCKCEMCLCLGALWDEC
CDCVGMCPNPNYSPTPTSKSTVEELHEPIPSLFRALTEGDTQLNWNIVSFPVAEELSHHENLVSFLETV
NQPHHQNVSVPSNNVHAPYSSDKEHMCTVVYFDDCMSIHQCKISCESMGASKYRWFHNACCECIGPECID
YGSKTVKCMNCF

TRTRPLE - GFP Tag - V



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_020648

ORF Size: 669 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_020648.6](#)

RefSeq Size: 3693 bp

RefSeq ORF: 672 bp

Locus ID: 57045

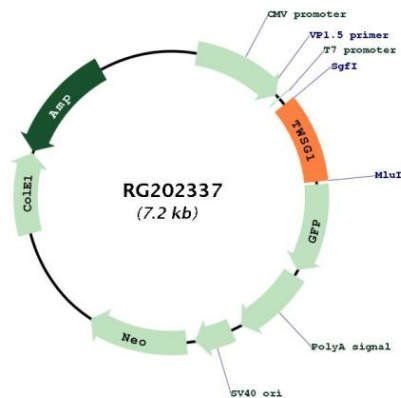
UniProt ID: [Q9GZX9](#)

Cytogenetics: 18p11.22

Domains: Tsg

Gene Summary: May be involved in dorsoventral axis formation. Seems to antagonize BMP signaling by forming ternary complexes with CHRD and BMPs, thereby preventing BMPs from binding to their receptors. In addition to the anti-BMP function, also has pro-BMP activity, partly mediated by cleavage and degradation of CHRD, which releases BMPs from ternary complexes. May be an important modulator of BMP-regulated cartilage development and chondrocyte differentiation. May play a role in thymocyte development (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG202337