

## Product datasheet for **RG208408**

### THBS4 (NM\_003248) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	THBS4 (NM_003248) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	THBS4
Synonyms:	TSP-4; TSP4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG208408 representing NM\_003248  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCTGGCCCCGCGCGGAGCCGCCCTCCTCCTGCTGCACCTGGTCTGCAGCGGTGGCTAGCGGCAGGCG  
 CCCAGGCCACCCCCAGGTCTTTGACCTTCTCCCATCTTCCAGTCAGAGGCTAAACCCAGGCGCTCTGCT  
 GCCAGTCTGACAGACCCCGCCCTGAATGATCTCTATGTGATTTCCACCTTCAAGCTGCAGACTAAAAGT  
 TCAGCCACCATCTTCGGTCTTTACTCTTCAACTGACAACAGTAAATATTTTGAATTTACTGTGATGGGAC  
 GCTTAAACAAAGCCATCTCCGTTACCTGAAGAACGATGGGAAGGTGCATTTGGTGGTTTTCAACAACCT  
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 CTAGAGCTCTACCTGGACTGCATCCAGGTGGATCCGTTACAATCTCCCAGGGCCTTTGCTGGCCCT  
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 GCTGGTGGTGGAGGCTCACTGTTCCAGGTGGCCAGCCTGCAAGACTGCTTCTGCAGCAGAGTGAGCCA  
 CTGGCTGCCACAGGCACAGGGGACTTTAACCGGCAGTTCTTGGGTCAAATGACACAATTAACCAACTCC  
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 ATGCCAGGCTTGCGGTCTCTCAAGTTTCAGTCTCCGACCCCAAGCACGGTGGTGCACCCCGGCTCCCCCT  
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 GTAGAGATGGCTTCCAGTGTGGGCCCTGCCCGAGGGCTACACAGGAAACGGGATCACCTGTATTGATGT  
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 AGTGATGGAGATGGGCACCAGGACAGCAGACAACCTGCCACCCGTCATTAACAGTGCCAGCTGGACA  
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 GACATCTGTGAGTCTGACTTTGACCAGGACCAGGTCATCGATCGGATCGACGCTGCCCAGAGAACGCAG  
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 CCAACCTCAAGTATCGTGCAATGACACCATCCCTGAGGACTTCAAGAGTTTCAAACCCAGAATTCGA  
 CGCTTCGATAAT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG208408 representing NM\_003248  
 Red=Cloning site Green=Tags(s)

MLAPRGAAVLLLHLVLQRWLAAGAATPQVFDLLPSSSQRLNPGALLPVL TDPALNDLYVISTFKLQTKS  
 SATIFGLYSSTDNSKYFEFTVMGRLNKAILRYLKNDGKVHLVVFNNLQLADGRRHRILLRLSNLQRGAGS  
 LELYLDLCIQVDSVHNLPRAFAGPSQKPETIELRTFQRKPQDFLEELKLVVRGSLFQVASLQDCFLQQSEP  
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 APPTRPPRRCDSDNCFRGVQCTDSRDGFQCGPCPEGYTGNGITCIDVDECKYHPCYPGVHCINLSPGFRC  
 DACPVGFTGPMVQGVGISFAKSNKQVCTDIDECRNGACVPNSICVNTLGSYRCGPKPGYTGDIQIRGCKA  
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 GRGDACDDMDGDGIKNILDNCPKFPNRDQRDKDGDGVDGADCDSPVSNPNQSDVDNDLVGDSCDTNQD  
 SDGDGHQDSTDNCPVINSACLDTDKDIGDECDDDDDNDGIPDLVPPGPDNCRVLPNPAQEDSNSDGVG  
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 VGYTAFNGVD FEGTFHVNTQTDDDYAGFIFGYQDSSSFYVVMWKQTEQTYWQATPFRAVAEPGIQLKAVK  
 SKTGPGEHLRNSLWHTGDTSDQVRLWKDSRNVGWKDKVSYRWFLQHRPQVGYIRVRFYEGSELVADSGV  
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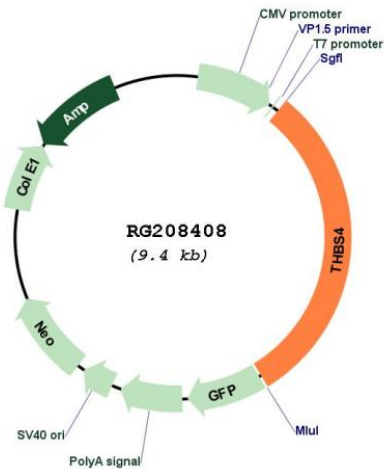
TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**


**ACCN:** NM\_003248

**ORF Size:** 2883 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\\_003248.6](#)

**RefSeq Size:** 3233 bp

**RefSeq ORF:** 2886 bp

**Locus ID:** 7060

**UniProt ID:** [P35443](#)

<b>Cytogenetics:</b>	5q14.1
<b>Domains:</b>	EGF_CA, TSPN, tsp_3, EGF, EGF
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	ECM-receptor interaction, Focal adhesion, TGF-beta signaling pathway
<b>Gene Summary:</b>	<p>The protein encoded by this gene belongs to the thrombospondin protein family. Thrombospondin family members are adhesive glycoproteins that mediate cell-to-cell and cell-to-matrix interactions. This protein forms a pentamer and can bind to heparin and calcium. It is involved in local signaling in the developing and adult nervous system, and it contributes to spinal sensitization and neuropathic pain states. This gene is activated during the stromal response to invasive breast cancer. It may also play a role in inflammatory responses in Alzheimer's disease. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2015]</p>