

## Product datasheet for **MG207747**

### Chst7 (NM\_021715) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Chst7 (NM_021715) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Chst7
Synonyms:	2600013M07Rik; C6ST-2; glcNAc6ST-4; Gn6st-4; GST5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG207747 representing NM\_021715  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGAAGGGCCGGCGCGCGCCGAGAGTATTGCAAGTTCACGCTGCTTTGGCGCTGTACACGCTTT  
 TGCTACTTCTGTCCCTCTGACTGGACAGCCACAGCGAGCAGGACAAGGGCAGGAACTGCCCCGGCT  
 GCAGCGCAGCTTGGGTGTGTGGAGCCTGGAGGCGCGCGGCCGGGAACGTGAGCAGGGCGCTGAGGTG  
 CGGTCCCTGGCCGAAGGAAACCCGGATCGATCCCCGGTCCCCGGCAACCTCAGCGCCGTCGGTGAGG  
 CGGTGACCCAGGAAAAGCAACACATCTATGTGCATGCCACCTGGCGCACC GGCTCGTCTTCTGGCGA  
 ACTCTTCAACCAGCACCCGACGTTTTCTACTTGTACGAGCCATGTGGCATCTGTGGCAGGCACTGTAT  
 CCGGGCGCAGCGGAGAGCCTGCAGGGCGCACTAAGAGACATGCTGCGCTCCCTCTCCGCTGTGATTTCT  
 CTGTGCTGCGCCTGTACGCGCAGCCTGGGACCCTGGGGAGCAGCACC GGACTCGGCCAACCTCACCAC  
 GGCCATGCTTTCCGCTGGCGGACCAACAAGGTCACTGCTCGCCGCTCTGTGCCCGCCGCGCCCGG  
 GCACGCGCGGACGTGGGACTCGTCGAGGACAAAGCCTGCGAAAGTACCTGCCCGCCGTTTCGCTCCGCG  
 CCCTGGAGGCCGAGTGCCGAAGTACCCGGTGGTGGTCATCAAAGACGTGCGGCTACTGGACCTGGGAGT  
 GCTGGTCCCTCTGCTGCGTGACCCAGGCCTCAACCTAAAGGTGGTGAACCTTCCGAGACCCTCGGGCC  
 GTGCACAACTCGCGCCTCAAGTCGAGGCAGGGACTGCTGCGCGAAAGCATCCAGGTGCTGCGCACGCGCC  
 AGAGGGGCGACCACTCCACCCGGTGTCTGCTGGCGCATGGAGTGGATGCCCGTCCGGGAGGCCAGGCCCG  
 GGCTCTGCCCTCGGCGCCACGCGCTGATTTCTTAAACCAGCGCGCTTGAGGTGATCTGTGAAGCGTGG  
 CTTGCGACCTGCTATTCACCCGCGCGCGCCGCTGGCTGAGGCGTGCCTACCTGCGGTTGCGGACACTCG  
 AGGACCTGGTGTGGCAGCCCCAAGCCAGCTGCGCCGCTGCTGCGCTTCTGGGTGCGGACACTCGC  
 CGCGCTTGATGCCCTTCGATTCAATATGACGCGGGGCTCGGCCTACGGCGCCGATCGTCCCTTCCACTTG  
 TCTGCGCGGGACCCGAGAGGCTGTGCACGCTGGCGCAACGTCTGAGCCAAGAGCAGGTGCGCCAAG  
 TGGAAACCGCCTGCGCCCTGCCATGCGTCTGCTTGCCTACCCTCGAAGTGGGGACGAACGCGACAGGAA  
 GACCGTACGGGAAGGGGAGACCACTGGAGACCAAGGCCAATTGGGCTGTG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>MG207747 representing NM\_021715  
 Red=Cloning site Green=Tags(s)

MKGRRRRRREYCKFTLLLALYLLLLLVPSVLDSHSEQDKGRNCPGLQRSLGVWSLEAAAAGEREQGAEV  
 RSLAEGNPDRSPGSPGNLSAVGEAVTQEKQHIYVHATWRTGSSFLGELFNQHPDVFYL YEPMHWLWQALY  
 PGDAESLQGALRDMLRSLFRCDFSVLRLYAQPGDPPERAPDSANLTTAMLFRWRNTNKVICSPP LCPAAPR  
 ARADVGLVEDKACESTCPPVSLRALEAECRKYPVVVIKDVRLDLGVLVPLLRDPGLNLKVVQLFRDPRA  
 VHNSRLKSRQGLLRESIQVLRTRQRGDHFRVLLAHGVDPARPGQARALPSAPRADFFLTSALEV ICEAW  
 LRDLLFTRGAPAWLRRRYLRLYEDLVWQPQAQLRRLRFSGLRTLAALDAFAFMTRGSAYGADRPFHL  
 SARDAREAVHAWRERLSQEQRVQVETACAPAMRLLAYPRSGDERDRKTVREGETPLETKANWAV

**TRTRPLE** - GFP Tag - V

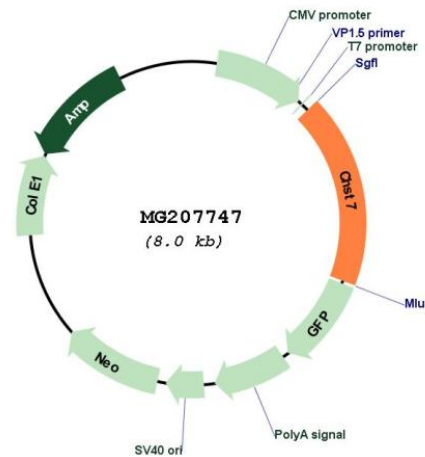
**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_021715

ORF Size: 1452 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\\_021715.1](#), [NP\\_068361.1](#)

**RefSeq Size:** 2248 bp

**RefSeq ORF:** 1455 bp

**Locus ID:** 60322

**UniProt ID:** [Q9EP78](#)

**Cytogenetics:** X A1.3

**Gene Summary:** Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as sulfonate donor to catalyze the transfer of sulfate to position 6 of non-reducing N-acetylglucosamine (GlcNAc) residues. Preferentially acts on mannose-linked GlcNAc. Also able to catalyze the transfer of sulfate to position 6 of the N-acetylgalactosamine (GalNAc) residue of chondroitin. Also acts on core 2 mucin-type oligosaccharide and N-acetyllactosamine oligomer with a lower efficiency. Has weak or no activity toward keratan sulfate and oligosaccharides containing the Galbeta1-4GlcNAc. Catalyzes 6-O-sulfation of beta-benzyl GlcNAc but not alpha- or beta-benzyl GalNAc.[UniProtKB/Swiss-Prot Function]