

## Product datasheet for **MG205424**

### Hs2st1 (NM\_011828) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Hs2st1 (NM\_011828) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Hs2st1  
**Synonyms:** 2OST; AW214369; Hs2st; mKIAA0448  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG205424 representing NM\_011828  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGGCTCCTCAGGATTATGATGCCGCCCAAGTTGCAGCTGCTGGCGGTGGTGGCCTTCGCGGTGGCGA  
TGCTCTTCTTGGAGAACCAGATCCAGAAGCTGGAGGAGTCCCGGGCGAAGCTAGAAAGGGCAATTGCAAG  
GCACGAAGTCCGAGAAATTGAACAGCGCCATACAATGGATGGCCCTCGGCAGGATGCAACTCTGGATGAA  
GAAGAAGACATCATCATTTATAACAGAGTGCCCAAACTGCAAGCACCTCGTTCACCAATATAGCCT  
ACGACCTGTGTCAAAGAATAGATACCATGTTCTTCACATCAACTACCAAAAATAACCCAGTAATGTC  
ATTGCAAGATCAGGTGCGCTTTGTGAAGAACATAACCACCTGGAACGAGATGAAGCCAGGCTTCTATCAC  
GGACACATCTCTTACTTGGATTTTGCAAAATTCGGTGTGAAGAAGAAACCGATTTATATCAATGTCATCA  
GGGACCTATTGAGAGGCTAGTTTCTACTATTACTTCCTGAGGTTTGGAGATGATTACAGACCAGGATT  
AAGGAGACGGAACAAGGAGACAAAAGACCTTCGATGAATGTGTGGCTGAGGGCGGCTCCGACTGTGCT  
CCAGAGAAGCTCTGGCTTCAGATTCCGTTCTTCTGTGGCCACAGCTCAGAATGCTGGAATGTAGGGAGCA  
GATGGGCCATGGACCAGGCTAAGTCTAACCTCATTAAATGAGTACTTCTGGTGGGAGTCAACGAGGAGCT  
CGAGGACTTCATCATGCTGCTCGAGGCAGCTTTGCCCGATTCTCCGGGGCGCTACCGACCTCTACCGT  
ACAGGAAAGAAATCTCACCTTAGGAAAACACAGAGAAGAAGCTGCCACCAAGCAAATATCGCGAAGC  
TGACAGTCTGACATTTGGAAGATGGAGAACGAGTTCTATGAGTTTGTCTGGAGCAGTTCCAGTTCAT  
CCGAGCTCACGCTGTCCACGAGAAAGACGGAGACCTCTACATCTGGCCAGAATTTTTCTACGAAAAG  
ATTTACCTAAGTCGAAC

**ACCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG205424 representing NM\_011828  
 Red=Cloning site Green=Tags(s)

MGLLRIMMPPKLQLLAVVAFVAVMLFLENQIQKLEESRAKLERAIARHEVREIEQRHTMDGPRQDATLDE  
 EEDIIIIYNRPKTASTSFTNIAIDLCAKNRYHVLHINTTKNNPVMSLQDQVRFVKNITTWEMKPGFYH  
 GHSYLDFAKFGVKKKPIYINVIKPIERLVSYFFLRFGDDYRPLRRRKQGDKTFDECVAEGGSDCA  
 PEKLWLQIPFFCGHSSECVNVSRRWAMDQAKSNLINEYFLVGVTEELEDLIMLLEAALPRFFRGATDLYR  
 TGKSHLRKTTTEKKLPTKQTIAKLQQSDIWKMENEFYEFALQFQFIRAHAVHEKDGDLIYLAQNFFYEK  
 IYPKSN

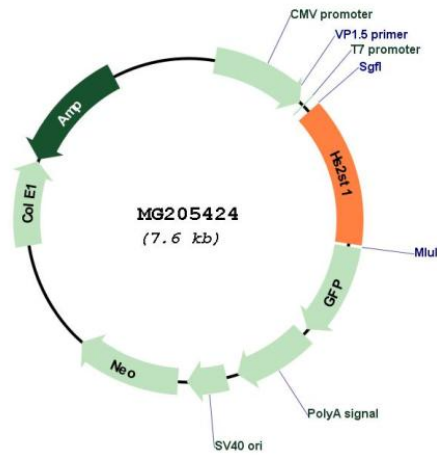
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_011828

<b>ORF Size:</b>	1068 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_011828.2</a> , <a href="#">NP_035958.2</a>
<b>RefSeq Size:</b>	4748 bp
<b>RefSeq ORF:</b>	1071 bp
<b>Locus ID:</b>	23908
<b>UniProt ID:</b>	<a href="#">Q8R3H7</a>
<b>Cytogenetics:</b>	3 H2
<b>Gene Summary:</b>	Catalyzes the transfer of sulfate to the C2-position of selected hexuronic acid residues within the maturing heparan sulfate (HS). 2-O-sulfation within HS, particularly of iduronate residues, is essential for HS to participate in a variety of high-affinity ligand-binding interactions and signaling processes. Required for metanephric development of kidney formation, suggesting that 2-O-sulfation within HS is essential for signaling between ureteric bud and metanephric mesenchyme. Mediates 2-O-sulfation of both L-iduronyl and D-glucuronyl residues. [UniProtKB/Swiss-Prot Function]