

Product datasheet for **MG208153**

Cyp7b1 (NM_007825) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cyp7b1 (NM_007825) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cyp7b1
Synonyms:	AW261589; D3Ertd552e; hct-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG208153 representing NM_007825
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGACGGGAGCCACGACCCTAGATGCCGCCTCGCCAGGGCCTCTCGCCCTCTAGGCCTTCTCTTTGCCG
 CCACCTTACTGCTCTCGCCCTGTTCTCTCACCCGGCGCACCCAGGCGCCCTCGTGAACCACTTGTAT
 AAAAGTTGGCTTCTTATCTTGGCATGGCCCTGAAATCTTTAAGGATCCGTTAACTTTCTTGAAAAC
 CTTCAAAGGCAACATGGTGACACTTTCACTGTCTTCTTGTGGGGAAGTATATAACATTTGTTCTGAACC
 CTTTCCAGTACCAGTATGTAACGAAAAACCAAAACAATTAAGCTTTCAGAAGTTCAGCAGCCGATTATC
 AGCGAAAGCCTTCTGTAAAGAAGCTGCTTACTGATGACGACCTTAATGAAGACGTTACAGAGCCTAT
 CTACTTCTACAAGCAACCTTTGGATGCTTCTTGAAACTATGATCCAAGAAGTAAAAGAATTATTTG
 AGTCCCAACTGCTAAAAATCACAGATTGGAACACAGAAAGAATATTTGCATTCTGTGGCTCACTGGTATT
 TGAGATCACATTTGCGACTCTATATGAAAAATCTTGTCTGGAACAAGAAACAAATTATCAGTGAGCTA
 AGGGATGATTTTTTAAATTTGATGACATGTTCCATACTTAGTATCTGCATACCTATTAGCTTCTAA
 GAAATGAAGAATCTATGCAGAAGAAAATTAAAAATGCCTCACATCAGAAAAAGTAGCTCAGATGCAAGG
 ACAGTCAAAAATTGTTACAGGAAAGGCAAGATCTGCTGAAAAGATACTATAGGCATGACGATCCTGAAATA
 GGAGCACATCATCTTGGCTTTCTCTGGGCCTCTAGCAAACACCATTCCAGCTATGTTCTGGGCAATGT
 ATTATATCTTCCGCATCCTGAAGCTATGGAAGCCCTGCGTGACGAAATTGACAGTTTCTGCAGTCAAC
 AGGTCAAAAGAAAGGACCTGGAATTTCACTCCACTTACCAGAGAACAATTGGACAGCTTGGTCTGCCTG
 GAAAGCACTATTCTTGAAGTTCTGAGGCTGTGCTCATACTCCAGCATCATCCGAGAAGTGCAGGAGGATA
 TGAATCTCAGCTTAGAGAGTAAGAGTTTCTCTGCGGAAAGGAGATTTGTAGCCCTCTTCTCCACT
 CATACACAATGACCCGGAATCTTCGATGCTCCAAGGAATTTAGGTTGATCGCTTCATAGAAGATGGT
 AAGAAGAAAAGCACGTTTTTCAAAGGAGGGAAGAGGCTGAAGACTACGTTATGCCTTTGGACTCGGAA
 CAAGCAATGTCCAGGGAGATATTTGCAAGTGAACGAAATGAAGCTACTGCTGATTATGCTTTAACTTA
 TTTTGATTTAGAAATTATCGACAGGAAGCCTATAGGGCTAAATCACAGTCGGATGTTTTTAGGTATTAG
 CACCCCGATTCTGCCGCTCCTTTAGGTACAAAGCAAAATCTTGGAGAAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG208153 representing NM_007825
 Red=Cloning site Green=Tags(s)

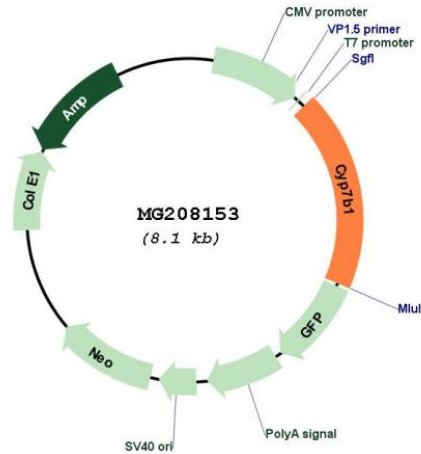
MQGATTLDAASPGPLALLGLLFAATLLL SALFLLTRRTRRRPREPPLIKGWL PYLGMALKFFKDP LFLKT
 LQRQHGDFTFVFLVGKYITFVLNPFQYQYVTKNPKQLSFQKFSRLSAKAFSVKKLLTDDDLNEDVHRAY
 LLLQGGKPLDALLEMIQEVEKELFESQLLITDWNTERIFAFCSLVFEITFATLYGKILAGNKKQIISEL
 RDDDFKFDMPYLVSDIPIQLLRNEESMOKKIKCLTSEKVAQMQGQSKIVQERQDLLKRYRHHDDPEI
 GAHHLGFLWASLANTIPAMFWAMYIILRHPEAMEALRDEIDSFLQSTGQKKGPGISVHFTREQLDSLVLCL
 ESTILEVLRCSYSSIIREVQEDMNL SLESKFSRLRKGDFVALFPPLIHNDPEIFDAPKEFRFRFIEDG
 KKKSTFFKGGKRLKTYVMPFGLGTSKCPGRYFAVNEMKLLLIMLLTYFDLEIIDRPIGLNHSRMFLGIQ
 HPDSAVSFRYKAKSWRS

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Plasmid Map:



ACCN: NM_007825

ORF Size: 1521 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_007825.2](#), [NP_031851.2](#)

RefSeq Size: 2158 bp

RefSeq ORF: 1524 bp

Locus ID: 13123

UniProt ID: [Q60991](#)

Cytogenetics: 3 4.98 cM

Gene Summary: Oxysterol 7alpha-hydroxylase that mediates formation of 7-alpha,25-dihydroxycholesterol (7-alpha,25-OHC) from 25-hydroxycholesterol (PubMed:9295351). Plays a key role in cell positioning and movement in lymphoid tissues: 7-alpha,25-dihydroxycholesterol (7-alpha,25-OHC) acts as a ligand for the G protein-coupled receptor GPR183/EBI2, a chemotactic receptor for a number of lymphoid cells (PubMed:22999953).[UniProtKB/Swiss-Prot Function]