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# Product datasheet for MR208273

## Mbtps2 (NM_172307) Mouse Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | Mbtps2 (NM_172307) Mouse Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | Mbtps2 |
| **Synonyms:** | 9630032G22Rik; AI662535 |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

**ORF Nucleotide Sequence:**

>MR208273 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATTCCGGTGTCGCTGCTGGTGGTGGTGGTGGGTGGTTGGACTGCCGTCTACCTGGCCGACTTGGTGT
TGAAGTCATCTGTGTATTTTAAACATTCTTATGAAGACTGGCTGGAAAACAATGGATTGAGCATCTCTCC
TTTTCATATAAGATGGCAAACTTCAATTTTTAATCGTGCCTTTTACAGTTGGGGACGGCGGAAAGCAAGG
ATGCTTTACCAATGGTTCAATTTTGGAATGGTGTTTGGCGTGATTGCCATGTTCAGCTCTTTTTTTCTCC
TTGGAAAAACACTGATGCAGACTTTGGCACAAATGATGGCTGACTCTCCCTCTCCTTATTCTTCCTCTTC
CTCTTCCTCCTCTTCCTCTTCCTCCTCTTCCTCTTCCTCCTCCTCTCTTCACAATGAACAGGTGTTGCAA
GTTGTGGTTCCCGGTATAAATTTACCTGTCAATCAGCTGACTTACTTCTTCGCTGCAGTCCTCATTAGTG
GTGTTGTACATGAAATTGGACACGGTATAGCAGCTATTAGGGAACAAGTTCGATTTAATGGCTTTGGAAT
TTTTCTCTTCATTATTTATCCTGGGGCATTTGTTGATCTGTTCACCACCCATTTGCAACTTATATCACCA
GTCCAGCAGCTAAGGATATTTTGTGCAGGTATATGGCATAATTTTGTCCTTGCTCTCCTTGGTATTTTAG
CTCTTGTTCTCCTCCCAGTAATCCTCTTGCCTTTTTACTACACTGGAGTTGGGGTACTTATCACTGAAGT
CGCAGAGGACTCACCTGCCATTGGACCCAGAGGCCTTTTTGTGGGAGACCTTGTCACTCATCTACAGGAT
TGTCCCGTTACTAATGTGCAAGATTGGAATGAATGTTTAGACACCATTGCATATGAGCCCCAAATTGGGT
ATTGTATAAGTGCATCAACGTTACAACAATTAAGCTTCCCAGTTAGAGCATACAAACGACTAGATGGTTC
TACTGAATGCTGTAACAATCACAGCCTCACAGATGTGTGCTTTTCCTACAGAAATAATTTCAATAAACGT
TTGCATACGTGTCTACCTGCCCGGAAAGCAGTTGAAGCTACTCAAGTTTGTAGAAGCAATAAAGATTGCA
AAAGCGGCGCAAGTTCTAGCTTCTGTATAGTACCGTCCTTGGAAACTCACACCCGACTAATCAAAGTGAA
ACATCCCCCGCAAATTGATATGCTGTATGTAGGGCACCCACTGCATCTTCACTACACAGTGAGCATTACA
AGTTTCATCCCACGTTTCAACTTTCTAAGCATAGATCTGCCAGTGATTGTGGAGACATTTGTCAAGTACC
TGATTTCTCTTTCTGGAGCTCTGGCTATTGTTAATGCAGTGCCCTGCTTTGCCTTGGATGGTCAATGGAT
TTTAAACTCTTTCCTGGATGCTACCCTTACTTCAGTAATTGGAGACAATGATGTCAAAGATCTGATTGGA
TTTTTCATCTTGCTTGGTGGCAGTGTACTTTTGGCTGCCAATGTGACACTGGGACTCTGGATGGTTACAG
CACGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

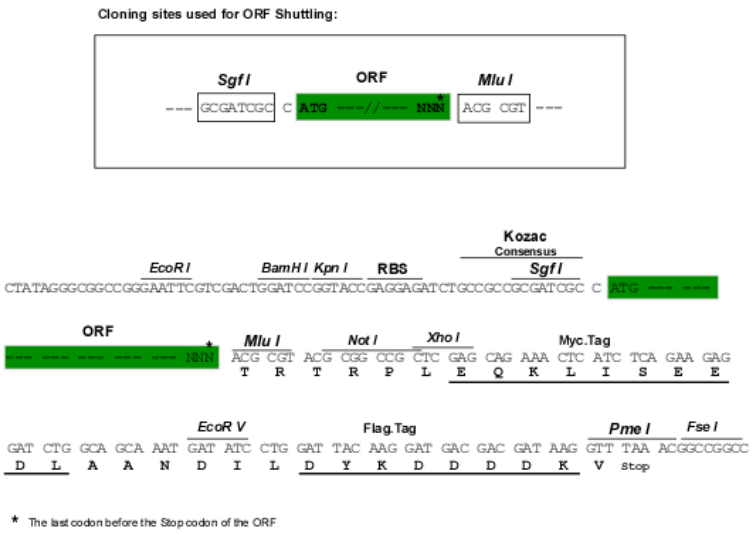
>MR208273 protein sequence
Red=Cloning site Green=Tags(s)

MIPVSLLVVVVGGWTAVYLADLVLKSSVYFKHSYEDWLENNGLSISPFHIRWQTSIFNRAFYSWGRRKAR
MLYQWFNFGMVFGVIAMFSSFFLLGKTLMQTLAQMMADSPSPYSSSSSSSSSSSSSSSSSSLHNEQVLQ
VVVPGINLPVNQLTYFFAAVLISGVVHEIGHGIAAIREQVRFNGFGIFLFIIYPGAFVDLFTTHLQLISP
VQQLRIFCAGIWHNFVLALLGILALVLLPVILLPFYYTGVGVLITEVAEDSPAIGPRGLFVGDLVTHLQD
CPVTNVQDWNECLDTIAYEPQIGYCISASTLQQLSFPVRAYKRLDGSTECCNNHSLTDVCFSYRNNFNKR
LHTCLPARKAVEATQVCRSNKDCKSGASSSFCIVPSLETHTRLIKVKHPPQIDMLYVGHPLHLHYTVSIT
SFIPRFNFLSIDLPVIVETFVKYLISLSGALAIVNAVPCFALDGQWILNSFLDATLTSVIGDNDVKDLIG
FFILLGGSVLLAANVTLGLWMVTAR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**




**ACCN:** NM_172307

**ORF Size:** 1548 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_172307.3, NP_758511.1

**RefSeq Size:** 4799 bp

**RefSeq ORF:** 1548 bp

**Locus ID:** 270669

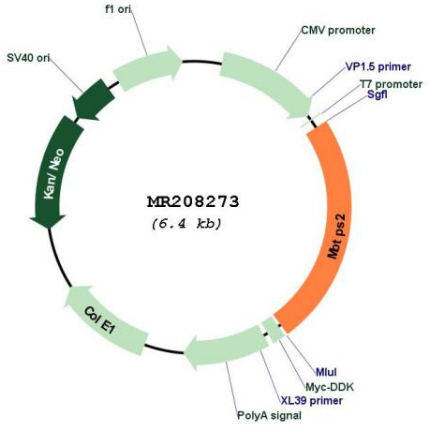
**UniProt ID:** Q8CHX6

**Cytogenetics:** X F4

**MW:** 57 kDa

**Gene Summary:** Involved in regulated intramembrane proteolysis (RIP) that is the cleavage of membrane-spanning regulatory proteins by proteases within the plane of the membrane. It cleaves sterol-regulatory element-binding proteins (SREBPs) within the first transmembrane segment, thereby releasing the N-terminal segment with a portion of the transmembrane segment attached. Mature N-terminal fragments shuttle to the nucleus and activate gene transcription. Involved in RIP-mediated regulation of bone formation.[UniProtKB/Swiss-Prot Function]

## Product images:




Circular map for MR208273