

## Product datasheet for SC125765

### Metallothionein (MT1A) (BC029475) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Metallothionein (MT1A) (BC029475) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Metallothionein  
**Synonyms:** metallothionein 1A; metallothionein 1A (functional); metallothionein 1S; MGC32848; MT1; MT1S; MTC  
**Mammalian Cell Selection:** None  
**Vector:** pCMV6-XL5  
**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for BC029475 edited  
AAGCCTTCCACGTGCGCCTTATAGCCTCTCAACTTCTTGCTTGGGATCTCCAACCTCACC  
GCGGCTCGAAATGGACCCCAACTGCTCCTGCGCCACTGGTGGCTCCTGCACCTGCACTGG  
CTCCTGCAAATGCAAAGAGTGCAAATGCAACTCCTGCAAGAAGAGCTGCTGCTCCTGCTG  
CCCCATGAGCTGTGCCAAGTGTGCCAGGGCTGCATCTGCAAAGGGGCATCAGAGAAGTG  
CAGCTGCTGTGCCTGATGTCCGGACAGCCCTGCTCGAAGATATAGAAAGAGTGACCTGCA  
CAAACCTTGAATTTTTTTTCCATACAACCCTGACCCATTTACTGTATTTTTTTAATGAA  
ATATGTGAATGATAATAAAAGTTGCTGACTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA  
AAA

**5' Read Nucleotide Sequence:** >OriGene 5' read for BC029475 unedited  
CCCCGGTCAGAATTTGTATACCACTGCACTATAGCGCGCCGCAATTCGCCATTACGGC  
CGGGGAAGCCTTCCACGTGCGCCTTATAGCCTCTCAACTTCTTGCTTGGGATCTCCAACC  
TACCCGCGGCTCGAAATGGACCCCAACTGCTCCTGCGCCACTGGTGGCTCCTGCACCTGC  
ACTGGCTCCTGCAAATGCAAAGAGTGCAAATGCAACTCCTGCAAGAAGAGCTGCTGCTCC  
TGCTGCCCATGAGCTGTGCCAAGTGTGCCAGGGCTGCATCTGCAAAGGGGCATCAGAG  
AAGTGCAGCTGCTGTGCCTGATGTCCGGACAGCCCTGCTCTAAGATATAGAAAGAGTGAC  
CTGCACAACTTGAATTTTTTTTCCATACAACCCTGACCCATTTACTGTATTTTTTTTA  
ATGAAATATGTGAATGATAATAAAAGTTGCTGACTTNNNNAAAAAAAAAAGAAAAACAAAA  
CAGAAAAACCCCAACCTCCNAGCCCATAAAAGTAAAAAAAAAACCTGTGGGCCGGTTCC  
GCCCTTAACCTAATTTCCGCCCCCGGATAGTTGTTCCCTAACACATCCCGGGGGG  
TTCCCTGGAACCTTTCCCGAGGGTTTTTTTTGGCCCCGGAATTTCCATTCTTTTTCCCC  
CCCCTCTTTCCGCCACCCAATTTACATTTCCCCCCCCTCGTGTGACCAGGGGGTCCCTC  
TATAAAATTCGCGCTGGACGGGGGCCCATTTGGCCCCAGGCGCAATTTCCAAAAACC  
ACCTTTTTTTTTTTTTCCCTTTTTCCCCCCCATTCTTTTTTTCCACCCCTCCCTT  
TTCCCCCCACCTCTTTCCCTTACGTTCCACCCCCCTTTTTTACCCCCCTAN



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|                               |   |
|-------------------------------|---|
| <b>Restriction Sites:</b>     | Please inquire  |
| <b>ACCN:</b>                  | BC029475  |
| <b>OTI Disclaimer:</b>        | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).  |
| <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="#">BC029475.1</a> , <a href="#">AAH29475.1</a>   |
| <b>RefSeq Size:</b>           | 465 bp  |
| <b>Locus ID:</b>              | 4489  |
| <b>Cytogenetics:</b>          | 16q13   |
| <b>Gene Summary:</b>          | This gene is a member of the metallothionein family of genes. Proteins encoded by this gene family are low in molecular weight, are cysteine-rich, lack aromatic residues, and bind divalent heavy metal ions. The conserved cysteine residues co-ordinate metal ions using mercaptide linkages. These proteins act as anti-oxidants, protect against hydroxyl free radicals, are important in homeostatic control of metal in the cell, and play a role in detoxification of heavy metals. Disruption of two metallothionein genes in mouse resulted in defects in protection against heavy metals, oxidative stress, immune reactions, carcinogens, and displayed obesity. [provided by RefSeq, Sep 2017] |