

Product datasheet for TP305942

OriGene Technologies, Inc.

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Metallothionein (MT1A) (NM_005946) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human metallothionein 1A (MT1A), 20 μg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC205942 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MDPNCSCATGGSCTCTGSCKCKECKCNSCKKSCCSCCPMSCAKCAQGCICKGASEKCSCCA

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-Myc/DDK

Predicted MW: 5.9 kDa

Concentration: >0.05 μg/μL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 005937

Locus ID: 4489

UniProt ID: P04731

RefSeq Size: 468

Cytogenetics: 16q13



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RefSeq ORF: 183

Synonyms: MT-1A; MT-IA; MT1; MT1S; MTC

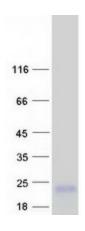
Summary: This gene is a member of the metallothionein family of genes. Proteins encoded by this gene

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]

Product images:



Coomassie blue staining of purified MT1A protein (Cat# TP305942). The protein was produced from HEK293T cells transfected with MT1A cDNA clone (Cat# [RC205942]) using MegaTran 2.0 (Cat# [TT210002]).