

## Product datasheet for **TP305942**

### **Metallothionein (MT1A) (NM\_005946) Human Recombinant Protein**

#### **Product data:**

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Recombinant protein of human metallothionein 1A (MT1A), 20 µg
<b>Species:</b>	Human
<b>Expression Host:</b>	HEK293T
<b>Expression cDNA Clone or AA Sequence:</b>	>RC205942 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)
	MDPNCSCATGGCTCTGCKCKECKCNSCKKSCCSCCPMSCAKCAQGCICKGASEKCSCCA
	<b>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</b>
<b>Tag:</b>	C-Myc/DDK
<b>Predicted MW:</b>	5.9 kDa
<b>Concentration:</b>	>0.05 µg/µL as determined by microplate BCA method
<b>Purity:</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
<b>Preparation:</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_005937</a>
<b>Locus ID:</b>	4489
<b>UniProt ID:</b>	<a href="#">P04731</a>
<b>RefSeq Size:</b>	468
<b>Cytogenetics:</b>	16q13



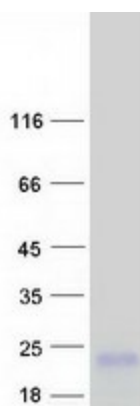
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RefSeq ORF: 183

Synonyms: MT-1A; MT-1A; 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]).