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Product datasheet for PH305942

Metallothionein (MT1A) (NM_005946) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	MT1A MS Standard C13 and N15-labeled recombinant protein (NP_005937)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC205942
Predicted MW:	6.1 kDa
Protein Sequence:	>RC205942 protein sequence Red=Cloning site Green=Tags(s) MDPNCSCATGGSCTCTGSCKCKECKCNSCKKSCCSCCPMSCAKCAQGCICKGASEKCSCCA TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_005937
RefSeq Size:	468
RefSeq ORF:	183
Synonyms:	MT-1A; MT-IA; MT1; MT1S; MTC
Locus ID:	4489
UniProt ID:	P04731
Cytogenetics:	16q13

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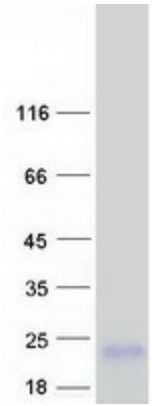
Summary: This gene is a member of the metallothionein family of genes. Proteins encoded by this gene family are low in molecular weight, are cysteine-rich, lack aromatic residues, and bind divalent heavy metal ions. The conserved cysteine residues co-ordinate metal ions using mercaptide linkages. These 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]).