

Product datasheet for PH302748

Metallothionein (MT2A) (NM_005953) Human Mass Spec Standard

Product data:

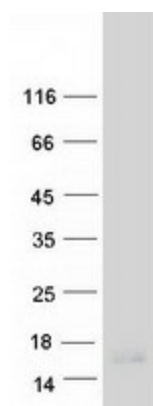
Product Type:	Mass Spec Standards
Description:	MT2A MS Standard C13 and N15-labeled recombinant protein (NP_005944)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC202748
Predicted MW:	6 kDa
Protein Sequence:	>RC202748 protein sequence Red=Cloning site Green=Tags(s) MDPNCSAAGDSCTCAGSCKCKECKCTSCKKSCCSCPVGCAKCAQGCICKGASDKCSCCA 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_005944
RefSeq Size:	466
RefSeq ORF:	183
Synonyms:	MT-2; MT-II; MT2
Locus ID:	4502
UniProt ID:	P02795
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, altering the intracellular concentration of heavy metals in the cell. 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. The encoded protein interacts with the protein encoded by the homeobox containing 1 gene in some cell types, controlling intracellular zinc levels, affecting apoptotic and autophagy pathways. Some polymorphisms in this gene are associated with an increased risk of cancer. [provided by RefSeq, Sep 2017]

Product images:

Coomassie blue staining of purified MT2A protein (Cat# [TP302748]). The protein was produced from HEK293T cells transfected with MT2A cDNA clone (Cat# [RC202748]) using MegaTran 2.0 (Cat# [TT210002]).