

Product datasheet for PH308669

alpha Tubulin (TUBA1A) (NM_006009) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	TUBA1A MS Standard C13 and N15-labeled recombinant protein (NP_006000)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC208669
Predicted MW:	50.1 kDa
Protein Sequence:	>RC208669 protein sequence Red=Cloning site Green=Tags(s)

MRECISIHVGQAGVQIGNACWELYLEHGIQPDGQMP SDKTIGGGDSFN TFFSETGAGKHVPRAVFVDL
EPTVIDEVRTGTYRQLFHPEQLITGKEDAANNYARGHYTIGKEIIDLVLDRIKRLADQCTGLQGFLVFHS
FGGGTGS GFTSLLMERLSVDYGGKSKLEFSIYPAPQVSTAVVEPYNSILTTHTTLEHSDCAF MVDNEAIY
DICRRNLDIERPTYTNLNLIGQIVSSITASLRFDGALNVDL TEFQTNLVPYPRIHFPLATYAPVISA EK
AYHEQLSVAEITNACFEPANQMVKCDPRHGKYM ACCLLYRGDVVPKDVNAAIATIKTKRTIQFVDWCPTG
FKVGINYQPPTVVPGGDLAKVQRAVCMLSN TTAIAEAWARLDHKFDL MYAKRA FVHWYVGE GMEEGEFSE
AREDMAALEKDYEEVGVDSVEGEGEEGEEY

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

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- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-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:	<u>NP_006000</u>
RefSeq Size:	1930
RefSeq ORF:	1353
Synonyms:	B-ALPHA-1; LIS3; TUBA3



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Locus ID: 7846

UniProt ID: [Q71U36](#)

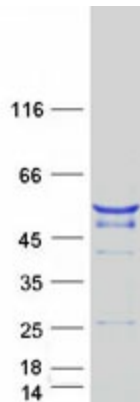
Cytogenetics: 12q13.12

Summary: Microtubules of the eukaryotic cytoskeleton perform essential and diverse functions and are composed of a heterodimer of alpha and beta tubulins. The genes encoding these microtubule constituents belong to the tubulin superfamily, which is composed of six distinct families. Genes from the alpha, beta and gamma tubulin families are found in all eukaryotes. The alpha and beta tubulins represent the major components of microtubules, while gamma tubulin plays a critical role in the nucleation of microtubule assembly. There are multiple alpha and beta tubulin genes, which are highly conserved among species. This gene encodes alpha tubulin and is highly similar to the mouse and rat Tuba1 genes. Northern blot studies have shown that the gene expression is predominantly found in morphologically differentiated neurologic cells. This gene is one of three alpha-tubulin genes in a cluster on chromosome 12q. Mutations in this gene cause lissencephaly type 3 (LIS3) - a neurological condition characterized by microcephaly, intellectual disability, and early-onset epilepsy caused by defective neuronal migration. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2017]

Protein Families: Druggable Genome

Protein Pathways: Gap junction, Pathogenic Escherichia coli infection

Product images:



Coomassie blue staining of purified TUBA1A protein (Cat# [TP308669]). The protein was produced from HEK293T cells transfected with TUBA1A cDNA clone (Cat# [RC208669]) using MegaTran 2.0 (Cat# [TT210002]).