

## Product datasheet for **TP308669M**

### alpha Tubulin (TUBA1A) (NM\_006009) Human Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human tubulin, alpha 1a (TUBA1A), 100 µg

**Species:** Human

**Expression Host:** HEK293T

**Expression cDNA Clone or AA Sequence:** >RC208669 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

MRECISIHVGQAGVQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPRAVFVDL  
EPTVIDEVRTGTYRQLFHPEQLITGKEDAANNYARGHYTIGKEIIDLVLDRIKRLADQCTGLQGFLVFHS  
FGGGTGS GF T S L L M E R L S V D Y G K K S K L E F S I Y P A P Q V S T A V V E P Y N S I L T T H T T L E H S D C A F M V D N E A I Y  
D I C R R N L D I E R P T Y T N L N R L I G Q I V S S I T A S L R F D G A L N V D L T E F Q T N L V P Y P R I H F P L A T Y A P V I S A E K  
A Y H E Q L S V A E I T N A C F E P A N Q M V K C D P R H G K Y M A C C L L Y R G D V W P K D V N A A I A T I K T K R T I Q F V D W C P T G  
F K V G I N Y Q P P T V P G G D L A K V Q R A V C M L S N T T A I A E A W A R L D H K F D L M Y A K R A F V H W Y V G E G M E E G E F S E  
A R E D M A A L E K D Y E E V G V D S V E G E G E E E G E E Y

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Tag:** C-Myc/DDK

**Predicted MW:** 50 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\\_006000](#)



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Locus ID: 7846

UniProt ID: [Q71U36](#)

RefSeq Size: 1930

Cytogenetics: 12q13.12

RefSeq ORF: 1353

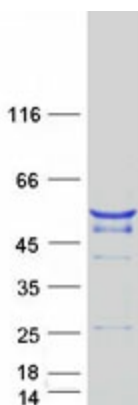
Synonyms: B-ALPHA-1; LIS3; TUBA3

**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]).