



Recombinant Rat Tubulin alpha-1A chain (Tuba1a)

Product Code	CSB-EP025306RA-B
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P68370
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	>85% (SDS-PAGE)
Sequence	MRECISIHVGQAGVQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFF SETGAGK HVPRAVFVDLEPTVIDEVRTGTYRQLFHPEQLITGKEDAANNYARGHYTIGKEII DLVLD RIRKLADQCTGLQGFLVFHSGGGTSGSFTSLLMERLSVDYGKKSLEFSIYP APQVSTA VVEPYNSILTTHTTLEHSDCAFMDNEAIYDICRRNLDIERPTYTNLNRLIGQIVS SITA SLRFDGALNVDLTEFQTNLVPYPRIHFPLATYAPVISA EKAYHEQLSVAEITNAC FEPAN QMVKCDPRHGKYMCCLLYRGDVVPKDVNAAIATIKTKRTIQFVDWCPTGFKV GINYQPP TVVPGGDLAKVQRAVCMLSNTTAIAEAWARLDHKFDLMYAKRAVHWYVGGEG MEEGEFSE AREDMAALEKDYEYEVGVDSVEGEGEGEEEGEEY
Source	E.coli
Target Names	Tuba1a
Protein Names	Recommended name: Tubulin alpha-1A chain Alternative name(s): Alpha-tubulin 1 Tubulin alpha-1 chain
Expression Region	1-451
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full length protein
Target Details	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 mouse and rat Tuba1 gene. Northern blotting 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.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.