



# Recombinant Rat Tubulin alpha-1A chain (Tuba1a)

<b>Product Code</b>	CSB-MP025306RA
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P68370
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	<p>MRECISIHVGQAGVQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFF  SETGAGK  HVPRAVFVDLEPTVIDEVRTGTYRQLFHPEQLITGKEDAANNYARGHYTIGKEII  DLVLD  RIRKLADQCTGLQGFLVFHSFGGGTGSGFTSLLMERLSVDYGKKSLEFSIYP  APQVSTA  VVEPYNSILTTHTTLEHSDCAFMDNEAIYDICRRNLDIERPTYTNLNRLIGQIVS  SITA  SLRFDGALNVDLTEFQTNLVPYPRIHFPLATYAPVISA EKAYHEQLSVAEITNAC  FEPAN  QMVKCDPRHGKYM ACCLLYRGDVVPKDVNAAIATIKTKRTIQFVDWCPTGFKV  GINYQPP  TVVPGGDLAKVQRAVCMLSNTTAIAEAWARLDHKFDLMYAKRAVHWYVGE  G MEEGEFSE AREDMAALEKDYE EVGVDSVEGEGEEEGEEY</p>
<b>Source</b>	Mammalian cell
<b>Target Names</b>	Tuba1a
<b>Protein Names</b>	Recommended name: Tubulin alpha-1A chain Alternative name(s): Alpha-tubulin 1 Tubulin alpha-1 chain
<b>Expression Region</b>	1-451
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full length protein
<b>Target Details</b>	<p>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</p>



alpha-tubulin genes in a cluster on chromosome 12q.

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**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.

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**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.