

Product datasheet for SC332920

alpha Tubulin (TUBA1A) (NM_001270399) Human Untagged Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | alpha Tubulin (TUBA1A) (NM_001270399) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | alpha Tubulin |
| Synonyms: | B-ALPHA-1; LIS3; TUBA3 |
| Vector: | pCMV6-Entry (PS100001) |
| Fully Sequenced ORF: | >SC332920 representing NM_001270399. Blue=Insert sequence Red=Cloning site Green=Tag(s) |

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ATCGTGAGTGCATCTCATCCACGTTGCCAGGCTGGTCCAGATTGCAATGCCCTGGAGCTC
TACTGCCTGGAACACGGCATTCCAGGCCATGGCCAGATGCCAAGTGACAAGACCATTGGGGAGGAGAT
GATTCTTCACACCTCTTCAGTGAGACGGGGCTGCCAAGCATGTGCCCGGGAGTGTAGAC
TTGGAACCCACAGTCATTGATGAAAGTTCGACTGGCACCTACGCCAGCTTCCACCCCTGAGCAACTT
ATCACAGGCAAAGAAGATGCTGCCATAACTATGCCCGAGGGCACTACACCATTGCAAGGAGATCATT
GACCTCGTGGACCGAATTGCAAGCTGGCCGACCACTGACGGGTCTCCAGGGCTTCTGGTTTC
CACAGCTTGGGGAACTGGTTCTGGGTCACCTCGTGTCTGGAACGTCAGTTGATTAT
GGCAAGAAGTCCAAGTGGAGTTCTATTACCGCGCCCCAGGTTCCACAGCTGAGTTGAGCCC
TACAACCTCCATCACCACCCACACCCCTGGGACACTCTGATTGCTCATGGTAGACAATGAG
GCCATCTATGACATCTGCGTAGAAACCTCGATATTGAGCGTCAACCTATACTAACCTGAATAGGTTA
ATAGGTCAAATTGTCCTCCATCACTGCTCCCTGAGATTGATGGAGCCCTGAATGTTGACCTGACA
GAATTCCAGACCAACCTGGTGCCTATCCCGCATCCACTCCCTCTGGCCACATATGCCCTGTCATC
TCTGCTGAGAAAGCTACCATGAAACAGCTTCTGAGCAGAGATACCAATGCTTGCTTGGCCAGCC
AACCAGATGGTAAATGTGACCTCGCATGGTAATACATGGCTTGCTGCCCTGTTGACCGTGGTAC
GTGGTCCCAAAGATGTCATGCTGCCATTGCCACCATCAAGACCAAGCGTACCATCCAGTTGTTG
TGGGCCACTGGCTCAAGGTTGGCATCAACTACCAGCCTCCACTGTGGTGCCTGGTGGAGACCTG
GCCAAGGTACAGAGAGCTGTGCAATGCTGAGCAACACCACAGCCATTGCTGAGGCCCTGGCTGCC
GACCAAGTTGACCTGATGTATGCCAACAGTGCCTTGTACTGGTACGTTGGGGAGGGATGGAG
GAAGGTGAGTTTCAGAGGCCGTGAGGACATGGCTGCCCTGAGAAGGATTATGAGGAGGTTGGTGTG
GATTCTGTTGAGGGAGGGTGAGGAAGAAGGAGAGGAATACTAA

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| Restriction Sites: | Sgfl-Mlul |
| ACCN: | NM_001270399 |
| Insert Size: | 1356 bp |



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| OTI Disclaimer: | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP). |
| Components: | The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water). |
| Reconstitution Method: | <ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C. |
| RefSeq: | <u>NM_001270399.1</u> |
| RefSeq Size: | 2490 bp |
| RefSeq ORF: | 1356 bp |
| Locus ID: | 7846 |
| UniProt ID: | <u>Q71U36</u> |
| Cytogenetics: | 12q13.12 |
| Protein Families: | Druggable Genome |
| Protein Pathways: | Gap junction, Pathogenic Escherichia coli infection |
| MW: | 50.1 kDa |
| Gene Summary: | <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 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]</p> <p>Transcript Variant: This variant (2) contains an alternate segment at its 5' end which results in the use of a different start codon, compared to variant 1. Variants 1 and 2 encode the same protein (isoform 1) but use distinct start codons.</p> |