

Product datasheet for TP509420

Spast (NM_016962) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse spastin (Spast), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR209420 representing NM_016962 Red =Cloning site Green =Tags(s)

MSSPAGRRKKKGGSGASPAPARPPPPAAVPAPAAGPAPAAGSPPKRNPSFSSPLVWGFALLRLLACHLG
LLFAWLCQRFSRALMAAKRSSGTAPAPASPPPEPGGGEAESVRVVFHKQAFEYISIALRIDEEEKGQKE
QAVEWYKKGIEELEKGIIVITGQGEQYERARRLQAKMMTNLVMKDRLLQLEKLQPVLFQFSKSTQTDVYN
ESTNLTCRNGHLQSESGAVPKRKDPLTHASNSLPRSKTVLKSGSAGLSGHHRAPSCSGLSMVSGARPGPG
PAATTHKGTGPKPNRTNKPSTPTTAVRKKKDLKNFRNVDNSLANLIMNEIVDNGTAVKFDDIAGQELAKQA
LQEIVLPSLRPELFTGLRAPARGLLLFPGPGNGKTM LAKAVAAESNATFFNISAASLTSKYVGEKELV
RALFAVARELQPSIIFIDEVDSLLCERREGEHDASRRLKTEFLIEFDGVQSAGDDRVLVMGATNRPQELD
EAVLRRFIKRVYVSLPNEETRLLLLKNLLCKQGSPLTQKELAQ LARMTDGYSGSDLTALAKDAALGPIRE
LKPEQVKNMSASEMRNIRLSDFTESLKKIKRSVSPQTL EAYIRWNKDFGDTTV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	66.8 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
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 after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.



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RefSeq: [NP_058658](#)

Locus ID: 50850

UniProt ID: [Q9QYY8](#)

RefSeq Size: 4693

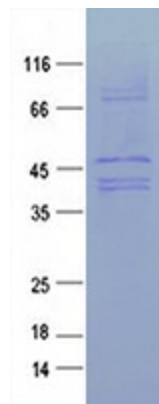
Cytogenetics: 17 E2

RefSeq ORF: 1839

Synonyms: mKIAA1083; Spg4

Summary: ATP-dependent microtubule severing protein that specifically recognizes and cuts microtubules that are polyglutamylated (PubMed:19141076 PubMed:20530212). Preferentially recognizes and acts on microtubules decorated with short polyglutamate tails: severing activity increases as the number of glutamates per tubulin rises from one to eight, but decreases beyond this glutamylation threshold (By similarity). Severing activity is not dependent on tubulin acetylation or detyrosination (By similarity). Microtubule severing promotes reorganization of cellular microtubule arrays and the release of microtubules from the centrosome following nucleation (By similarity). It is critical for the biogenesis and maintenance of complex microtubule arrays in axons, spindles and cilia (By similarity). SPAST is involved in abscission step of cytokinesis and nuclear envelope reassembly during anaphase in cooperation with the ESCRT-III complex (By similarity). Recruited at the midbody, probably by IST1, and participates in membrane fission during abscission together with the ESCRT-III complex (By similarity). Recruited to the nuclear membrane by IST1 and mediates microtubule severing, promoting nuclear envelope sealing and mitotic spindle disassembly during late anaphase (By similarity). Required for membrane traffic from the endoplasmic reticulum (ER) to the Golgi and endosome recycling (By similarity). Recruited by IST1 to endosomes and regulates early endosomal tubulation and recycling by mediating microtubule severing (By similarity). Probably plays a role in axon growth and the formation of axonal branches (PubMed:18234839).[UniProtKB/Swiss-Prot Function]

Product images:



Purified recombinant protein Spast was analyzed by SDS-PAGE gel and Coomassie Blue Staining.