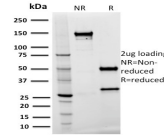


Spastin Monoclonal Mouse Antibody (Sp 3G11-1)



Product Description

The AAA protein family members share an ATPase domain and have roles in various cellular processes including intracellular motility, membrane trafficking, proteolysis, protein folding and organelle biogenesis. Spastin, a member of the AAA protein family, is a 616 amino acid protein and is involved in the function or assembly of nuclear protein complexes. The Spastin protein is expressed ubiquitously and localizes to the nucleus and the cytoplasm, where it may also be involved in microtubule dynamics. Mutations in the Spastin gene (SPAST, SPG4) cause the most common form of spastic paraplegia 4, an autosomal dominant form of hereditary spastic paraplegia (HSP). HSPs comprise a group of inherited neurological disorders characterized by spastic lower extremity weakness due to a length-dependent, retrograde axonopathy of corticospinal motor neurons. SPAST-specific mutations account for approximately 40% of all autosomal dominant HSPs. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

References

Note: References for this clone sold by other suppliers may be listed for expected applications.

1. J Cell Biol (2010) 189(6): 945-954. (WB)
2. eLife (2015) 4:e05068. (IF)
3. Oncotarget (2016) 7(21): 30820-30830. (IF)

Product attributes

| | |
|---------------------------------------|---|
| Antibody number | #2844 |
| Antibody reactivity (target) | Spastin |
| Antibody type | Primary |
| Host species | Mouse |
| Clonality | Monoclonal |
| Clone | Sp 3G11-1 |
| Isotype | IgG2a, kappa |
| Molecular weight | 52 kDa |
| Synonyms | ADPSP; FSP2; Spast; Spatin; SPG4 |
| Human gene symbol | SPAST |
| Entrez gene ID | 6683 |
| SwissProt | Q9UP0 |
| Unigene | 468091 |
| Immunogen | Recombinant full-length human Spastin protein. |
| Antibody target cellular localization | Plasma membrane, Secreted (extracellular) |
| Species reactivity | Human, Mouse, Rat |
| Expected antibody applications | IF (published for clone), WB (published for clone) |
| Positive control | HeLa cells. Rat brain extract. |
| Shipping condition | Room temperature |
| Storage Conditions | Note: store BSA-free antibodies at -10 to -35 °C. Store at 2 to 8 °C. Protect fluorescent conjugates from light |
| Regulatory status | For research use only (RUO) |
| Antibody/conjugate formulation | Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide |
| Shelf life | Guaranteed for at least 24 months from date of receipt when stored as recommended |

| Antibody # prefix | Conjugation | Ex/Em (nm) | Laser line | Detection channel | Dye Features |
|-------------------|--------------------|------------|------------|--------------------------|----------------------------------|
| BNC04 | CF®405S | 404/431 | 405 | DAPI (microscopy), AF405 | CF®405S Features |
| BNC88 | CF®488A | 490/515 | 488 | GFP, FITC | CF®488A Features |
| BNC68 | CF®568 | 562/583 | 532, 561 | RFP, TRITC | CF®568 Features |
| BNC94 | CF®594 | 593/614 | 561 | Texas Red® | CF®594 Features |
| BNC40 | CF®640R | 642/662 | 633-640 | Cy®5 | CF®640R Features |
| BNC47 | CF®647 | 650/665 | 633-640 | Cy®5 | CF®647 Features |
| BNCB | Biotin | N/A | N/A | N/A | |
| BNUB | Purified | N/A | N/A | N/A | |
| BNUM | Purified, BSA-free | N/A | N/A | N/A | |

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