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AP26166PU-N Polyclonal Antibody to Myospryn (C-term) - Aff - Purified

Alternate names: C5orf10, CMYA5, Cardiomyopathy-associated protein 5, DTNBP2, Dystrobrevin-binding protein 2, Genethonin-3, SPRY domain-containing protein 2, SPRYD2, TRIM76, Tripartite motif-containing protein 76

Quantity: 0.1 mg

Background: SPRYD2, also known as Myospryn, was originally identified as the muscle-specific partner of dysbindin and as a Mef-2 target gene. It is a large scaffolding protein localized to the Z-disc/costamere region of striated muscle. SPRYD2 includes a noncanonical tripartite motif (TRIM-like) that lacks the RING domain but consists of a B-box coiled coil (BBC), fibronectin 3 (FN3) repeats, and SPRY domains. SPRYD2 interacts with desmin and calcineurin, and it has been suggested to play a role in the biogenesis of lysosome and negatively regulates slow-fiber-type transformation and skeletal muscle regeneration. SPRYD2 is dysregulated in Duchenne muscular dystrophy.

Uniprot ID: Q8N3K9

NCBI: NP_705838

GeneID: 202333

Host: Rabbit

Immunogen: 18 amino acid peptide near the carboxy terminus of human SPRYD2

Format:
State: Liquid Ig fraction
Purification: Affinity chromatography purified via peptide column
Buffer System: PBS containing 0.02% sodium azide

Applications:
ELISA.
Western blot: 1-2 µg/ml.
Positive control: Rat Brain Tissue Lysate.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:
This antibody detects Myospryn at C-term.
SPRYD2 antibody is predicted to not cross-react with other SPRYD protein family members. At least four isoforms of SPRYD2 are known to exist.

Species Reactivity: **Tested:** Human, mouse, rat.

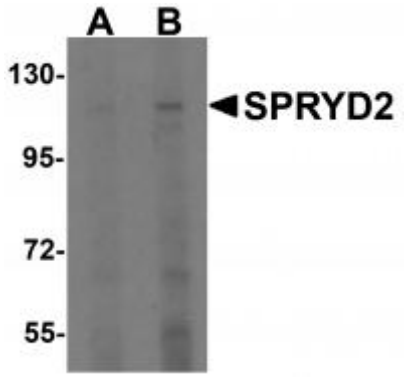
Storage:
Store at 2 - 8 °C for up to three months or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:
1. Benson MA, Tinsley CL, Blake DJ. Myospryn is a novel binding partner for dysbindin in muscle. J Biol Chem. 2004 Mar 12;279(11):10450-8. Epub 2003 Dec 19. PubMed PMID: 14688250.
2. Sarparanta J. Biology of myospryn: what's known? J. Muscle Res. Cell Motil. 2008; 29:177-80
3. Durham JT, Brand OM, Arnold M, Reynolds JG, Muthukumar L, Weiler H, et al.

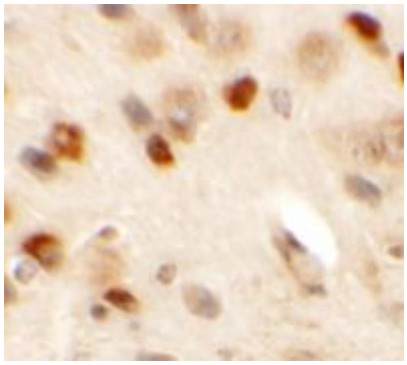
Myospryn is a direct transcriptional target for MEF2A that encodes a striated muscle, alpha-actinin-interacting, costamere-localized protein. J Biol Chem. 2006 Mar 10;281(10):6841-9. Epub 2006 Jan 3. PubMed PMID: 16407236.
4. Kielbasa OM, Reynolds JG, Wu CL, Snyder CM, Cho MY, Weiler H, et al. Myospryn is a calcineurin-interacting protein that negatively modulates slow-fiber-type transformation and skeletal muscle regeneration. FASEB J. 2011 Jul;25(7):2276-86. doi: 10.1096/fj.10-169219. Epub 2011 Mar 22. PubMed PMID: 21427212.

Pictures:

Western blot analysis of SPRYD2 in rat brain tissue lysate with SPRYD2 antibody at (A) 1 and (B) 2 ug/mL



Immunohistochemistry of SPRYD2 in mouse brain tissue with SPRYD2 antibody at 2.5 ug/mL.



Immunofluorescence of SPRYD2 in mouse brain tissue with SPRYD2 antibody at 20 ug/mL.