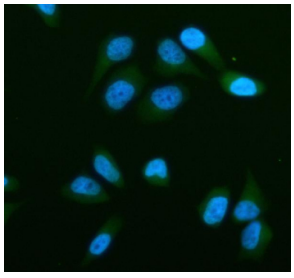
STRN3 Antibody / Striatin 3 (FY13085)

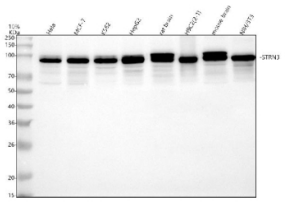
Catalog No.	Formulation	Size
FY13085	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

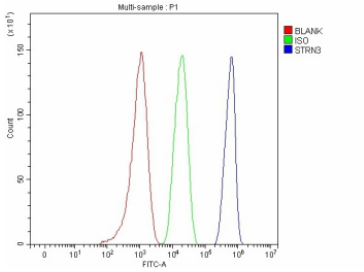
Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q13033
Localization	Cytoplasm
Applications	Western Blot: 0.25-0.5ug/ml Flow cytometry: 1-3ug/million cells ELISA: 0.1-0.5ug/ml
Limitations	This STRN3 antibody is available for research use only.



Immunofluorescent staining of STRN3 using anti-STRN3 antibody (green). STRN3 was detected in an immunocytochemical section of human HELA cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/ml rabbit anti-STRN3 antibody overnight at 4oC. DyLight 488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37oC. The section was counterstained with DAPI nuclear stain (blue). Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Western blot analysis of STRN3 using anti-STRN3 antibody. Lane 1: human Hela whole cell lysates, Lane 2: human MCF-7 whole cell lysates, Lane 3: human K562 whole cell lysates, Lane 4: human HepG2 whole cell lysates, Lane 5: rat brain tissue lysates, Lane 6: rat H9C2(2-1) whole cell lysates, Lane 7: mouse brain tissue lysates, Lane 8: mouse NIH/3T3 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-STRN3 antibody at 0.25 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using enhanced chemiluminescent. Although STRN3 isoforms are typically described at ~87 kDa and ~78 kDa, the antibody detects a predominant species at ~94 kDa across samples, with lighter lower bands. In mouse and rat brain, STRN3 appears as a doublet, consistent with differential phosphorylation within the STRIPAK scaffold that increases apparent molecular weight and resolves phospho-isoforms on SDS-PAGE. The lower signals likely represent the shorter isoform and/or limited proteolysis.



Flow Cytometry analysis of HepG2 cells using anti-STRN3 antibody. Overlay histogram showing HepG2 cells stained with (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-STRN3 antibody (1 ug/million cells) for 30 min at 20oC. DyLight 488 conjugated goat anti-rabbit IgG (5-10 ug/million cells) was used as secondary antibody for 30 minutes at 20oC. Isotype control antibody (Green line) was rabbit IgG (1 ug/million cells) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Description

STRN3 antibody detects Striatin-3, a calmodulin-binding scaffold protein that forms part of the striatin-interacting phosphatase and kinase (STRIPAK) complex. The UniProt recommended name is Striatin-3 (STRN3). This adaptor protein coordinates protein phosphatase 2A (PP2A) signaling and regulates cytoskeletal organization, cell migration, and signal transduction.

Functionally, STRN3 antibody identifies an 837-amino-acid protein that serves as a platform for assembling PP2A catalytic and regulatory subunits along with kinases such as MST3 and GCKIII family members. STRN3 modulates dephosphorylation of signaling proteins involved in cell adhesion, polarity, and morphogenesis. Its calmodulin-binding domain enables calcium-dependent regulation of complex formation.

The STRN3 gene is located on chromosome 14q12 and is expressed in various tissues, with particularly high levels in brain and heart. STRN3 participates in diverse signaling pathways, including the Hippo pathway, where it regulates MST1/2 kinase activity and contributes to growth control and organ size regulation. Its scaffold function allows spatial coordination between kinases and phosphatases within signaling microdomains.

Pathologically, aberrant STRN3 activity has been linked to cancer progression, cardiac hypertrophy, and neuronal dysfunction. Dysregulated STRIPAK signaling disrupts phosphorylation balance and cytoskeletal remodeling. STRN3 expression changes have been observed in glioblastoma and colon carcinoma, underscoring its importance in cell growth and motility.

STRN3 antibody is suitable for western blotting, immunofluorescence, and co-immunoprecipitation to identify PP2A-associated signaling complexes. NSJ Bioreagents provides validated STRN3 antibody reagents for research in kinase-phosphatase networks, cytoskeletal regulation, and signal transduction.

Structurally, Striatin-3 includes an N-terminal caveolin-binding motif, coiled-coil regions for oligomerization, a calmodulin-

binding site, and WD-repeat domains for protein interactions. This antibody aids studies into STRN3's role as a scaffold coordinating phosphatase and kinase communication across multiple pathways.

Application Notes

Optimal dilution of the STRN3 antibody should be determined by the researcher.

Immunogen

E.coli-derived human STRN3 recombinant protein (Position: D243-H690) was used as the immunogen for the STRN3 antibody.

Storage

After reconstitution, the STRN3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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