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Anti-SNRPN Antibody Picoband™ (monoclonal, 6F12)

Catalog # ABO14846

Specification

Anti-SNRPN Antibody Picoband™ (monoclonal, 6F12) - Product Information

Application	**WB, FC**
Primary Accession	P63162
Host	**Mouse**
Isotype	**Mouse IgG2b**
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Format	**Lyophilized**

Description
Anti-SNRPN Antibody Picoband™ (monoclonal, 6F12) . Tested in Flow Cytometry, WB applications. This antibody reacts with Human, Mouse, Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500 µg/ml.

Anti-SNRPN Antibody Picoband™ (monoclonal, 6F12) - Additional Information

Gene ID 6638

Other Names
Small nuclear ribonucleoprotein-associated protein N, snRNP-N, Sm protein D, Sm-D, Sm protein N, Sm-N, SmN, Tissue-specific-splicing protein, SNRPN, HCERN3, SMN

Calculated MW
26 kDa KDa

Application Details
Western blot, 0.1-0.5 µg/ml
 Flow Cytometry, 1-3 µg/1x10^6 cells

Subcellular Localization
Nucleus.

Tissue Specificity
Expressed in brain and lymphoblasts.

Contents
Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of human SNRPN, identical to the related mouse and rat sequences.

Cross Reactivity
No cross-reactivity with other proteins.

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Storage	**Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.**

Anti-SNRPN Antibody Picoband™ (monoclonal, 6F12) - Protein Information

Name SNRPN

Synonyms HCERN3, SMN

Function
May be involved in tissue-specific alternative RNA processing events.

Cellular Location
Nucleus.

Tissue Location
Expressed in brain and lymphoblasts.

Anti-SNRPN Antibody Picoband™ (monoclonal, 6F12) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-SNRPN Antibody Picoband™ (monoclonal, 6F12) - Images

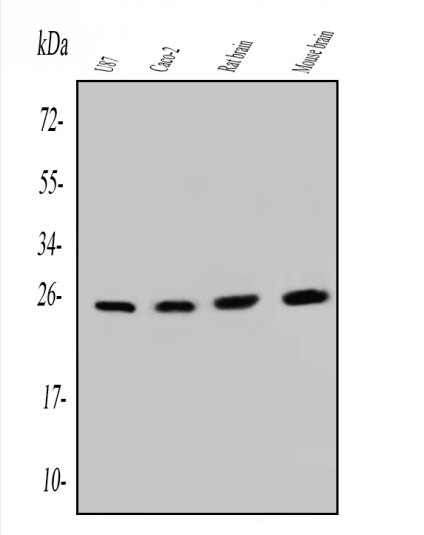

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Figure 1. Western blot analysis of SNRPN using anti-SNRPN antibody (M02173).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30ug of sample under reducing conditions.
Lane 1: human U87 whole cell lysates,
Lane 2: human Caco-2 whole cell lysates,
Lane 3: rat brain tissue lysates,
Lane 4: mouse brain tissue lysates.
After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-SNRPN antigen affinity purified monoclonal antibody (Catalog # M02173) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for SNRPN at approximately 26KD. The expected band size for SNRPN is at 26KD.

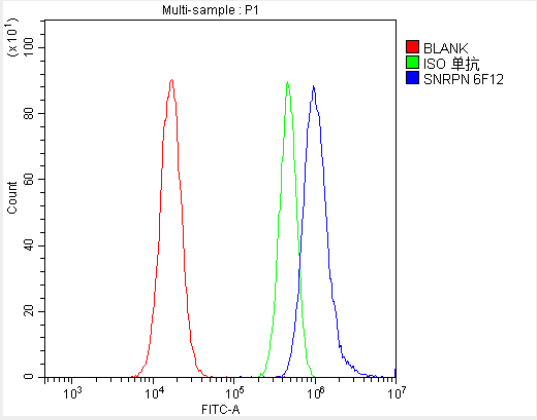

Figure 2. Flow Cytometry analysis of A549 cells using anti-SNRPN antibody (M02173).
Overlay histogram showing A549 cells stained with M02173 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-SNRPN Antibody (M02173, 1 µg/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 µg/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 µg/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Anti-SNRPN Antibody Picoband™ (monoclonal, 6F12) - Background

SNRPN (Small Nuclear Ribonucleoprotein Polypeptide N), also called SMN, is a bicistronic imprinted gene that encodes 2 polypeptides, the SmN splicing factor, which is involved in RNA processing, and the SNRPN upstream reading frame (SNURF) polypeptide. The protein encoded by this gene is one polypeptide of a small nuclear ribonucleoprotein complex and belongs to the snRNP SMB/SMN family. SNRPN also encodes a long alternatively spliced transcript containing several small nucleolar RNAs (snoRNAs) and extends downstream to partially overlap the UBE3A gene in the antisense orientation. PWS arises from loss of function of genes in this region expressed exclusively from the paternal chromosome, suggesting that SNRPN may play a role in its etiology. The SNRPN gene is mapped on 15q11.2. Analysis of maternal DNA and of SNRPN cDNA confirmed that the maternal allele is not expressed in fetal brain and heart. Deletions in the transcription unit of the imprinted SNRPN gene occur in patients who have PWS or Angelman syndrome because of a parental imprint switch failure in this chromosomal domain.