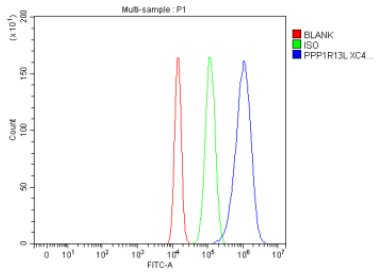
PPP1R13L Antibody / iASPP / Protein phosphatase 1 regulatory subunit 13 like (FY13276)

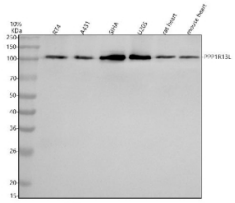
Catalog No.	Formulation	Size
FY13276	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
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	Q8WUF5
Applications	Western Blot : 0.25-0.5ug/ml Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This PPP1R13L antibody is available for research use only.



Flow Cytometry analysis of human U20S cells using anti-PPP1R13L antibody. Overlay histogram showing U20S cells stained with (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PPP1R13L 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.



Western blot analysis of iASPP/PPP1R13L using anti-PPP1R13L antibody. Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: human RT4 whole cell lysates, Lane 2: human whole cell lysates, Lane 3: human SIHA whole cell lysates, Lane 4: human U20S whole cell lysates, Lane 5: rat heart tissue lysates, Lane 6: mouse heart tissue 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-PPP1R13L antibody at 0.5 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 an ECL Plus Western Blotting Substrate. A predominant band is detected at an approximately 110 kDa in all samples, running above the predicted ~89 kDa mass but consistent with the higher apparent molecular weight reported for the heavily post translationally modified regulatory protein PPP1R13L in the literature.

Description

PPP1R13L antibody detects Protein phosphatase 1 regulatory subunit 13 like, a transcriptional regulator that interacts with p53, NF-kappaB, and protein phosphatase 1 (PP1) to control apoptosis and gene expression. The UniProt recommended name is Protein phosphatase 1 regulatory subunit 13 like (PPP1R13L). Also known as inhibitor of apoptosis-stimulating protein of p53 (iASPP), it acts as a negative regulator of p53-mediated transcription and apoptosis.

Functionally, PPP1R13L antibody identifies a 918-amino-acid nuclear and cytoplasmic protein that binds to the DNA-binding domain of p53, preventing the activation of pro-apoptotic genes such as BAX and PUMA. PPP1R13L also interacts with the RelA/p65 subunit of NF-kappaB, inhibiting its transcriptional activity and modulating inflammatory signaling. Through its association with PP1, it influences the phosphorylation state of nuclear proteins, linking phosphatase activity to transcriptional repression.

The PPP1R13L gene is located on chromosome 19q13.32 and is expressed in multiple tissues, including heart, liver, and brain, with elevated expression in dividing cells and tumors. Expression is induced by growth factors and oncogenic signals, reflecting its role in balancing survival and stress responses. PPP1R13L is part of the ASPP (apoptosis-stimulating proteins of p53) family, which fine-tunes p53 function depending on cellular context.

Pathologically, overexpression of PPP1R13L contributes to oncogenesis by suppressing p53-dependent apoptosis and enhancing cell survival under stress. High levels are found in breast, liver, and hematologic malignancies. Conversely, reduced expression sensitizes cells to apoptosis. Genetic variants have also been linked to cardiomyopathy and developmental abnormalities. Research using PPP1R13L antibody supports studies in apoptosis regulation, tumor biology, and transcriptional control.

PPP1R13L antibody can be validated for western blotting, immunofluorescence, and chromatin immunoprecipitation to detect transcriptional regulators. NSJ Bioreagents provides PPP1R13L antibody reagents optimized for studies in p53 signaling, phosphatase regulation, and apoptosis mechanisms.

Structurally, Protein phosphatase 1 regulatory subunit 13 like contains ankyrin repeats and an SH3 domain that mediate interactions with p53 and NF-kappaB, as well as PP1-binding motifs for phosphatase association. This modular structure allows PPP1R13L to serve as a multifunctional scaffold integrating transcriptional repression and survival signaling. This antibody supports investigation of PPP1R13L's role in cell fate determination, stress response, and tumor progression.

Application Notes

Optimal dilution of the PPP1R13L antibody should be determined by the researcher.

Immunogen

E.coli-derived human iASPP/PPP1R13L recombinant protein (Position: D94-Q753) was used as the immunogen for the PPP1R13L antibody.

Storage

After reconstitution, the PPP1R13L antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.