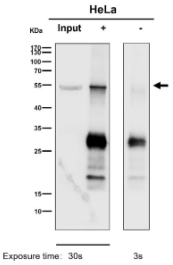
PPP2R5E Antibody / Serine threonine protein phosphatase 2A regulatory subunit B epsilon [clone 30P58] (FY13045)

Catalog No.	Formulation	Size
FY13045	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

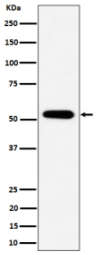
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	30P58
Purity	Affinity chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q16537
Applications	Western blot: 1:500-1:2000 Immunohistochemistry: 1:50-1:200 Immunocytochemistry/Immunofluorescence: 1:50-1:200 Immunoprecipitation: 1:50
Limitations	This PPP2R5E antibody is available for research use only.



Immunoprecipitation analysis using the antibody at 1:50 dilution. Western blot at 1:1000 dilution. Predicted molecular weight: 50-56 kDa.



Western blot analysis of PPP2R5E expression in human 293 cell lysate using PPP2R5E antibody. Predicted molecular weight: 50-56 kDa.

Description

PPP2R5E antibody detects Serine threonine protein phosphatase 2A regulatory subunit B epsilon, encoded by the PPP2R5E gene. Protein phosphatase 2A is one of the major serine threonine phosphatases in eukaryotic cells, controlling phosphorylation dependent signaling across pathways that regulate cell cycle progression, apoptosis, and metabolism. PPP2R5E belongs to the B56 family of regulatory subunits, which determine substrate specificity and subcellular localization of PP2A holoenzymes. PPP2R5E antibody provides a powerful reagent for investigating the diverse roles of this phosphatase in physiology and disease.

PP2A holoenzymes consist of a scaffolding subunit, a catalytic subunit, and one of multiple regulatory subunits. PPP2R5E directs PP2A activity to specific substrates at centrosomes, kinetochores, and other cellular structures. Research using PPP2R5E antibody has shown that this regulatory subunit influences chromosome segregation, spindle formation, and checkpoint activation. These roles make it critical in maintaining genome stability and proper mitotic progression.

In cancer biology, PP2A acts as a tumor suppressor, and its inactivation contributes to oncogenic signaling. Altered expression of regulatory subunits such as PPP2R5E can impair PP2A function, enhancing signaling through pathways such as PI3K AKT and MAPK. Research with PPP2R5E antibody has demonstrated that loss of this subunit promotes tumorigenesis and contributes to chemotherapy resistance. Conversely, restoration of PP2A activity has been explored as a therapeutic strategy in malignancy, highlighting the importance of PPP2R5E in cancer control.

Beyond cancer, PPP2R5E has roles in neurodegeneration and cardiovascular disease. Studies using PPP2R5E antibody have linked PP2A dysfunction to tau hyperphosphorylation and Alzheimer disease pathology. In the cardiovascular system, PP2A regulatory subunits contribute to signaling in heart muscle contraction and vascular function. These findings underscore the broad physiological impact of PPP2R5E.

PPP2R5E antibody is widely applied in western blotting, immunohistochemistry, and immunoprecipitation. Western blotting measures expression across proliferative and neuronal tissues, immunohistochemistry highlights nuclear localization, and immunoprecipitation isolates PP2A complexes containing PPP2R5E. These applications demonstrate the versatility of PPP2R5E antibody in molecular biology and translational research.

By supplying validated PPP2R5E antibody reagents, NSJ Bioreagents supports research into phosphatase biology, cancer mechanisms, and neurodegeneration. Detection of Serine threonine protein phosphatase 2A regulatory subunit B epsilon provides critical insight into how PP2A holoenzymes regulate signaling networks.

Application Notes

Optimal dilution of the PPP2R5E antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human PPP2R5E was used as the immunogen for the PPP2R5E antibody.

Storage

Store the PPP2R5E antibody at -20oC.

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