

Anti-PPP4C Antibody (2F11-D10-G4)

Mouse Monoclonal Antibody

Catalog # ABV12074

Product Information

Application	WB, IF
Primary Accession	P60510
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG2a
Clone Names	2F11-D10-G4
Calculated MW	35080

Additional Information

Gene ID	5531
Positive Control	WB: HeLa and Jurkat cell lysates; IF: HeLa cells; IHC: human breast cancer tissue
Application & Usage	WB; 1:200, IF; 1:200
Other Names	Pp4, Protein phosphatase X, PP-X, PPP4C, PPP4, PPX
Target/Specificity	Serine/threonine-protein phosphatase 4 catalytic subunit
Antibody Form	Liquid
Appearance	Colorless liquid
Reconstitution & Storage	-20 °C
Background Descriptions	
Precautions	Anti-PPP4C Antibody (2F11-D10-G4) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PPP4C
Synonyms	PPP4, PPX
Function	Protein phosphatase that is involved in many processes such as microtubule organization at centrosomes, maturation of spliceosomal snRNPs, apoptosis, DNA repair, tumor necrosis factor (TNF)-alpha signaling, activation of c-Jun N-terminal kinase MAPK8, regulation of histone acetylation, DNA damage checkpoint signaling, NF-kappa-B activation and cell migration. The

PPP4C-PPP4R1 PP4 complex may play a role in dephosphorylation and regulation of HDAC3. The PPP4C-PPP4R2- PPP4R3A PP4 complex specifically dephosphorylates H2AX phosphorylated on Ser-140 (gamma-H2AX) generated during DNA replication and required for DNA double strand break repair. Dephosphorylates NDEL1 at CDK1 phosphorylation sites and negatively regulates CDK1 activity in interphase (By similarity). In response to DNA damage, catalyzes RPA2 dephosphorylation, an essential step for DNA repair since it allows the efficient RPA2-mediated recruitment of RAD51 to chromatin.

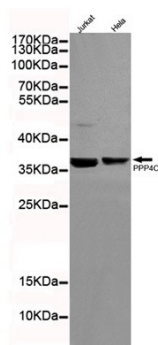
Cellular Location

Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome

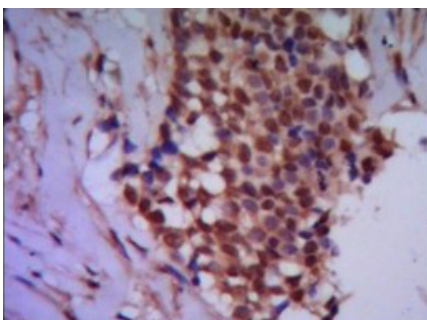
Background

Protein phosphatase that is involved in many processes such as microtubule organization at centrosomes, maturation of spliceosomal snRNPs, apoptosis, DNA repair, tumor necrosis factor (TNF)-alpha signaling, activation of c-Jun N-terminal kinase MAPK8, regulation of histone acetylation, DNA damage checkpoint signaling, NF-kappa-B activation and cell migration. The PPP4C-PPP4R1 PP4 complex may play a role in dephosphorylation and regulation of HDAC3. The PPP4C-PPP4R2-PPP4R3A PP4 complex specifically dephosphorylates H2AFX phosphorylated on Ser-140 (gamma-H2AFX) generated during DNA replication and required for DNA double strand break repair.

Images

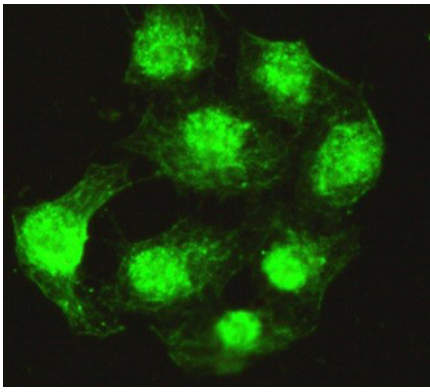


Western blot detection of Protein Phosphatase 4C in Hefla and Jurkat cell lysates using Protein Phosphatase 4C Antibody



Immunocytochemistry of HeLa cells using anti-Protein Phosphatase 4C Antibody

IHC of paraffin-embedded human breast cancer using anti-Protein Phosphatase 4C Antibody



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.