

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

Mouse Monoclonal Antibody Catalog # ABV12074

Specification

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

Application WB, IHC, IF
Primary Accession
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype Mouse IgG2a

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

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

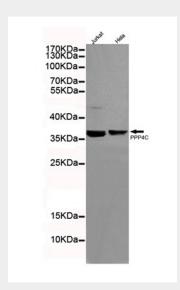
Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome

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

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

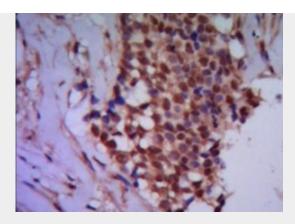
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

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

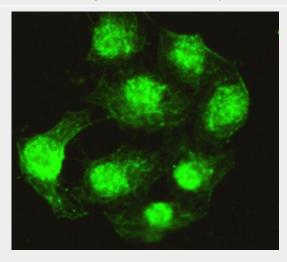


Western blot detection of Protein Phosphatase 4C in Hefa and Jurkat cell lysates using Protein Phosphatase 4C Antibody





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



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

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