

ARG54007 anti-PPP4C antibody

Package: 100 μl, 50 μl Store at: -20°C

Summary

| Product Description | Mouse Monoclonal antibody recognizes PPP4C |
|---------------------|--|
| Tested Reactivity | Hu |
| Tested Application | ICC/IF, IHC-P, WB |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | lgG2a |
| Target Name | PPP4C |
| Species | Human |
| Immunogen | Purified recombinant human Protein Phosphatase 4C protein fragments expressed in E.coli. |
| Conjugation | Un-conjugated |
| Alternate Names | PPP4; PPX; PP-X; Pp4; PPH3; EC 3.1.3.16; Serine/threonine-protein phosphatase 4 catalytic subunit; PP4; PP4C; Protein phosphatase X |

Application Instructions

| Application table | Application | Dilution |
|-------------------|--|-----------------|
| | ICC/IF | 1:200 |
| | IHC-P | Assay-dependent |
| | WB | 1:500 - 1:1000 |
| Application Note | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. | |
| Observed Size | 34 kDa | |

Properties

| Form | Liquid |
|---------------------|---|
| Purification | Affinity purified |
| Buffer | PBS (pH 7.4), 0.02% Sodium azide and 50% Glycerol |
| Preservative | 0.02% Sodium azide |
| Stabilizer | 50% Glycerol |
| Concentration | 0.8 mg/ml |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |

| Rio | infor | mati | ion |
|-----|-------|------|-----|
| DIU | mor | mat | |

| Database links | GenelD: 5531 Human |
|-----------------------|---|
| | Swiss-port # P60510 Human |
| Gene Symbol | PPP4C |
| Gene Full Name | protein phosphatase 4, catalytic subunit |
| Background | Protein phosphatase that is involved in many processes such as microtubule organization at centrosomes, maturation of spliceosomal snRNPs, apoptosis, 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 DSB repair. Dephosphorylates NDEL1 at CDK1 phosphorylation sites and negatively regulates CDK1 activity in interphase (By similarity) |
| 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 H2AFX phosphorylated on Ser-140 (gamma-H2AFX) 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. [UniProt] |
| Research Area | Signaling Transduction antibody |
| Calculated Mw | 35 kDa |
| РТМ | Methylation at the C-terminal Leu-307 is critical for interactions with regulatory subunits and functions in DNA repair. |
| Cellular Localization | Cytoplasm. Nucleus |

Images



ARG54007 anti-PPP4C antibody WB image

Western blot: 20 μg of HeLa and 293T cell lysates stained with ARG54007 anti-PPP4C antibody at 1:500 dilution.





ARG54007 anti-PPP4C antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG54007 anti-PPP4C antibody at 1:200 dilution.

ARG54007 anti-PPP4C antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast cancer tissue stained with ARG54007 anti-PPP4C antibody at 1:500 - 1:1000 dilution.