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Goat Anti-PP2A / PPP2R1A Antibody
Peptide-affinity purified goat antibody
Catalog # AF1850a

Specification

Goat Anti-PP2A / PPP2R1A Antibody - Product Information

Application	**WB, IHC, E**
Primary Accession	P30153
Other Accession	NP_055040, 5518
Reactivity	**Human, Mouse, Rat**
Predicted	**Pig, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**65309**

Goat Anti-PP2A / PPP2R1A Antibody - Additional Information

Gene ID 5518

Other Names
Serine/threonine-protein phosphatase 2A 65 kDa regulatory subunit A alpha isoform, Medium tumor antigen-associated 61 kDa protein, PP2A subunit A isoform PR65-alpha, PP2A subunit A isoform R1-alpha, PPP2R1A

Dilution
WB~~1:1000
IHC~~1:100~500
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-PP2A / PPP2R1A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-PP2A / PPP2R1A Antibody - Protein Information

Name PPP2R1A (HGNC:9302)

Function
The PR65 subunit of protein phosphatase 2A serves as a scaffolding molecule to coordinate the assembly of the catalytic subunit and a variable regulatory B subunit (PubMed:15525651, PubMed:16580887, PubMed:33243860, PubMed:33633399, PubMed:34004147, PubMed:8694763). Upon interaction with GNA12 promotes dephosphorylation of microtubule associated protein TAU/MAPT (PubMed:15525651). Required for proper chromosome segregation and for centromeric localization of SGO1 in mitosis (PubMed:16580887). Together with RACK1 adapter, mediates dephosphorylation of AKT1 at 'Ser-473', preventing AKT1 activation and AKT-mTOR signaling pathway (By similarity). Dephosphorylation of AKT1 is essential for regulatory T-cells (Treg) homeostasis and stability (By similarity). Part of the striatin-interacting phosphatase and kinase (STRIPAK) complexes (PubMed:18782753, PubMed:33633399). STRIPAK complexes have critical roles in protein (de)phosphorylation and are regulators of multiple signaling pathways including Hippo, MAPK, nuclear receptor and cytoskeleton remodeling (PubMed:18782753, PubMed:33633399). Different types of STRIPAK complexes are involved in a variety of biological processes such as cell growth, differentiation, apoptosis, metabolism and immune regulation (PubMed:18782753, PubMed:33633399). Key mediator of a quality checkpoint during transcription elongation as part of the Integrator-PP2A (INTAC) complex (PubMed:33243860, PubMed:34004147). The INTAC complex drives premature transcription termination of transcripts that are unfavorably configured for transcriptional elongation: within the INTAC complex, acts as a scaffolding subunit for PPP2CA, which catalyzes dephosphorylation of the C-terminal domain (CTD) of Pol II subunit POLR2A/RPB1 and SUPT5H/SPT5, thereby preventing transcriptional elongation (PubMed:33243860, PubMed:34004147). Regulates the recruitment of the SKA complex to kinetochores (PubMed:28982702).

Cellular Location
Cytoplasm {ECO:0000250|UniProtKB:Q32PI5}. Nucleus. Chromosome. Chromosome, centromere. Lateral cell membrane. Cell projection, dendrite. Note=Centromeric localization requires the presence of BUB1 (PubMed:16580887). Recruited to chromatin and transcription pause-release checkpoint via its association with the Integrator complex (PubMed:34004147, PubMed:33243860)

Goat Anti-PP2A / PPP2R1A Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation

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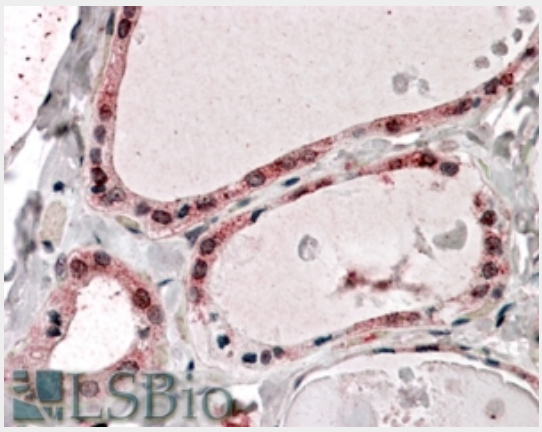
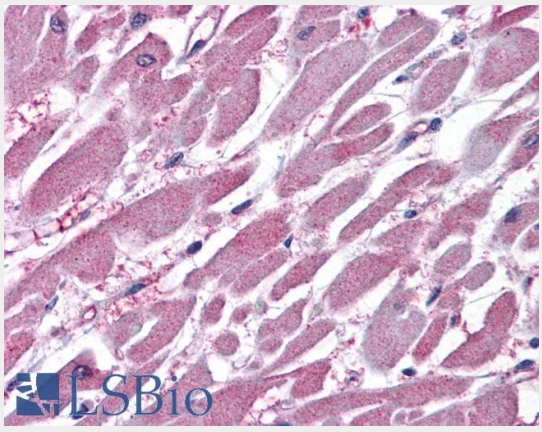
- Flow Cytomety
- Cell Culture

Goat Anti-PP2A / PPP2R1A Antibody - Images

AF1850a (2 µg/ml) staining of Human Thymus (A) and Human Lymph node (B) lysates (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF1850a (3.75 µg/ml) staining of paraffin embedded Human Thyroid Gland. Steamed antigen retrieval with citrate buffer pH 6, AP-staining. **This data is from a previous batch, not on sale.**



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AF1850a (3.75 µg/ml) staining of paraffin embedded Human Heart. Steamed antigen retrieval with citrate buffer pH 6, AP-staining. **This data is from a previous batch, not on sale.**