

Goat Anti-SMEK1 / KIAA2010 Antibody

Peptide-affinity purified goat antibody Catalog # AF2007a

### Specification

## Goat Anti-SMEK1 / KIAA2010 Antibody - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E <u>Q6IN85</u> <u>NP\_115949</u>, <u>55671</u>, <u>68734 (mouse)</u>, <u>314388</u> (rat) Human Mouse, Rat, Dog Goat Polyclonal 100ug/200ul IgG 95368

## Goat Anti-SMEK1 / KIAA2010 Antibody - Additional Information

Gene ID 55671

**Other Names** Serine/threonine-protein phosphatase 4 regulatory subunit 3A, SMEK homolog 1, SMEK1, KIAA2010, PP4R3A, PPP4R3A

Dilution WB~~1:1000 E~~N/A

Format

0.5 mg lgG/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-SMEK1 / KIAA2010 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat Anti-SMEK1 / KIAA2010 Antibody - Protein Information

Name PPP4R3A (HGNC:20219)

Function



Regulatory subunit of serine/threonine-protein phosphatase 4. May regulate the activity of PPP4C at centrosomal microtubule organizing centers. The PPP4C-PPP4R2-PPP4R3A PP4 complex specifically dephosphorylates H2AX phosphorylated on 'Ser-140' (gamma-H2AX) generated during DNA replication and required for DNA DSB repair.

**Cellular Location** 

Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus Note=In interphase localized in the cytoplasm and in the nucleus (with higher levels). During metaphase located in pericentriolar regions

## Goat Anti-SMEK1 / KIAA2010 Antibody - Protocols

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

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

### Goat Anti-SMEK1 / KIAA2010 Antibody - Images

-	250kDa 150kDa 100kDa 75kDa
	50kDa
	37kDa
	25kDa
	20kDa
	15kDa

AF2007a (0.3  $\mu$ g/ml) staining of Human Pancreas lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





HEK293 overexpressing SMEK1 (RC221040) and probed with AF2007a (mock transfection in first lane), tested by Origene.

# Goat Anti-SMEK1 / KIAA2010 Antibody - References

PP4R4/KIAA1622 forms a novel stable cytosolic complex with phosphoprotein phosphatase 4. Chen GI, et al. J Biol Chem, 2008 Oct 24. PMID 18715871.

Depletion of protein phosphatase 4 in human cells reveals essential roles in centrosome maturation, cell migration and the regulation of Rho GTPases. Martin-Granados C, et al. Int J Biochem Cell Biol, 2008. PMID 18487071.

Large-scale mapping of human protein-protein interactions by mass spectrometry. Ewing RM, et al. Mol Syst Biol, 2007. PMID 17353931.

Loss of SMEK, a novel, conserved protein, suppresses MEK1 null cell polarity, chemotaxis, and gene expression defects. Mendoza MC, et al. Mol Cell Biol, 2005 Sep. PMID 16107728.

A novel, evolutionarily conserved protein phosphatase complex involved in cisplatin sensitivity. Gingras AC, et al. Mol Cell Proteomics, 2005 Nov. PMID 16085932.