

**Goat Anti-SMEK1 / KIAA2010 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF2007a****Specification**

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

Application	WB
Primary Accession	<a href="#">Q6IN85</a>
Other Accession	<a href="#">NP_115949</a> , <a href="#">55671</a> , <a href="#">68734 (mouse)</a> , <a href="#">314388 (rat)</a>
Reactivity	Human
Predicted	Mouse, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	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

**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-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

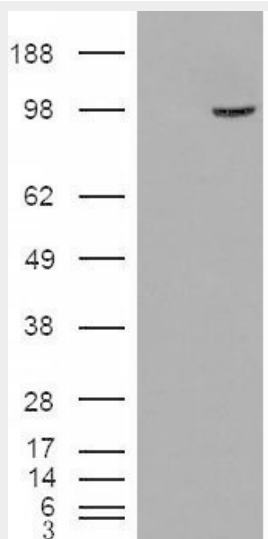
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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



AF2007a (0.3 µg/ml) staining of Human Pancreas lysate (35 µg 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.