

Goat Anti-AKAP9 / AKAP450 / CG-NAP Antibody
Peptide-affinity purified goat antibody
Catalog # AF1045a**Specification**

Goat Anti-AKAP9 / AKAP450 / CG-NAP Antibody - Product Information

Application	WB, E
Primary Accession	Q99996
Other Accession	NP_671714 , 10142
Reactivity	Human
Predicted	Mouse
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	452987

Goat Anti-AKAP9 / AKAP450 / CG-NAP Antibody - Additional Information**Gene ID** 10142**Other Names**

A-kinase anchor protein 9, AKAP-9, A-kinase anchor protein 350 kDa, AKAP 350, hgAKAP 350, A-kinase anchor protein 450 kDa, AKAP 450, AKAP 120-like protein, Centrosome- and Golgi-localized PKN-associated protein, CG-NAP, Protein hyperion, Protein kinase A-anchoring protein 9, PRKA9, Protein yotiao, AKAP9, AKAP350, AKAP450, KIAA0803

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-AKAP9 / AKAP450 / CG-NAP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-AKAP9 / AKAP450 / CG-NAP Antibody - Protein Information**Name** AKAP9**Synonyms** AKAP350, AKAP450, KIAA0803**Function**

Scaffolding protein that assembles several protein kinases and phosphatases on the centrosome

and Golgi apparatus. Required to maintain the integrity of the Golgi apparatus (PubMed:10202149, PubMed:15047863). Required for microtubule nucleation at the cis-side of the Golgi apparatus (PubMed:15047863, PubMed:19242490). Required for association of the centrosomes with the poles of the bipolar mitotic spindle during metaphase (PubMed:25657325). In complex with PDE4DIP isoform 13/MMG8/SMYLE, recruits CAMSAP2 to the Golgi apparatus and tethers non-centrosomal minus-end microtubules to the Golgi, an important step for polarized cell movement (PubMed:27666745, PubMed:28814570). In complex with PDE4DIP isoform 13/MMG8/SMYLE, EB1/MAPRE1 and CDK5RAP2, contributes to microtubules nucleation and extension also from the centrosome to the cell periphery (PubMed:29162697).

Cellular Location

Golgi apparatus. Cytoplasm Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Note=Cytoplasmic in parietal cells (PubMed:9915845). Recruited to the Golgi apparatus by GM130/GOLGA2 (PubMed:25657325). Localization at the centrosome versus Golgi apparatus may be cell line-dependent. In SKBr3 and HEK293F cells, exclusively located at the centrosome (PubMed:29162697). In HeLa, MDA- MB231 and RPE-1 cells, detected at the Golgi apparatus (PubMed:25217626, PubMed:29162697). In SK-BR-3 cells, recruited to the centrosome in the presence of CDK5RAP2 (PubMed:29162697)

Tissue Location

Widely expressed (PubMed:10202149). Isoform 4: Highly expressed in skeletal muscle and in pancreas (PubMed:9482789)

Goat Anti-AKAP9 / AKAP450 / CG-NAP 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-AKAP9 / AKAP450 / CG-NAP Antibody - Images

Goat Anti-AKAP9 / AKAP450 / CG-NAP Antibody - Background

The A-kinase anchor proteins (AKAPs) are a group of structurally diverse proteins which have the common function of binding to the regulatory subunit of protein kinase A (PKA) and confining the holoenzyme to discrete locations within the cell. This gene encodes a member of the AKAP family. Alternate splicing of this gene results in at least two isoforms that localize to the centrosome and the Golgi apparatus, and interact with numerous signaling proteins from multiple signal transduction pathways. These signaling proteins include type II protein kinase A, serine/threonine kinase protein kinase N, protein phosphatase 1, protein phosphatase 2a, protein kinase C-epsilon and phosphodiesterase 4D3.

Goat Anti-AKAP9 / AKAP450 / CG-NAP Antibody - References

A Large-scale genetic association study of esophageal adenocarcinoma risk. Liu CY, et al. Carcinogenesis, 2010 Jul. PMID 20453000.

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.

Integrin and CD3/TCR activation are regulated by the scaffold protein AKAP450. Robles-Valero J, et al. Blood, 2010 May 27. PMID 20231423.

International Lung Cancer Consortium: coordinated association study of 10 potential lung cancer susceptibility variants. Truong T, et al. Carcinogenesis, 2010 Apr. PMID 20106900.

Microtubule nucleation at the cis-side of the Golgi apparatus requires AKAP450 and GM130. Rivero S, et al. EMBO J, 2009 Apr 22. PMID 19242490.