

### GAK Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8061b

### Specification

# GAK Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region

WB, IHC-P,E <u>O14976</u> <u>P97874</u>, <u>O6P490</u> Human, Mouse Rat Rabbit Polyclonal Rabbit IgG 1140-1170

## GAK Antibody (C-term) - Additional Information

Gene ID 2580

**Other Names** Cyclin-G-associated kinase, GAK

#### Target/Specificity

This GAK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1140-1170 amino acids from the C-terminal region of human GAK.

**Dilution** WB~~1:1000 IHC-P~~1:50~100

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

**Precautions** GAK Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## GAK Antibody (C-term) - Protein Information

#### Name GAK (<u>HGNC:4113</u>)

Function Associates with cyclin G and CDK5. Seems to act as an auxilin homolog that is involved



in the uncoating of clathrin-coated vesicles by Hsc70 in non-neuronal cells. Expression oscillates slightly during the cell cycle, peaking at G1 (PubMed:<u>10625686</u>). May play a role in clathrin-mediated endocytosis and intracellular trafficking, and in the dynamics of clathrin assembly/disassembly (PubMed:<u>18489706</u>).

#### **Cellular Location**

Cytoplasm, perinuclear region. Golgi apparatus, trans-Golgi network. Cell junction, focal adhesion. Cytoplasmic vesicle, clathrin-coated vesicle. Note=Localizes to the perinuclear area and to the trans-Golgi network. Also seen on the plasma membrane, probably at focal adhesions. Recruitment to clathrin- coated vesicles depends on temporal variations in phosphoinositide composition of clathrin-coated vesicles (PubMed:31962345)

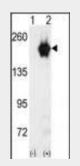
**Tissue Location** Ubiguitous. Highest in testis.

#### **GAK Antibody (C-term) - Protocols**

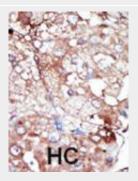
Provided below are standard protocols that you may find useful for product applications.

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

#### GAK Antibody (C-term) - Images

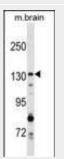


Western blot analysis of GAK (arrow) using GAK Antibody (C-term) (Cat.#AP8061b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the GAK gene (Lane 2) (Origene Technologies).





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



GAK Antibody (V1155) (Cat. #AP8061b) western blot analysis in mouse brain tissue lysates (35ug/lane).This demonstrates the GAK antibody detected the GAK protein (arrow).

### GAK Antibody (C-term) - Background

GAK, a member of the Ser/Thr protein kinase family, associates with cyclin G and CDK5. It appears to act as an auxilin homolog that is involved in the uncoating of clathrin-coated vesicles by Hsc70 in non-neuronal cells. Expression oscillates slightly during the cell cycle, peaking at G1. GAK localizes to the perinuclear area and to the trans-Golgi network. It is also observed on the plasma membrane, probably at focals adhesions. Expression is ubiquitous, wiht highest levels in testis. The protein contains 1 J domain and 1 tensin domain.

## GAK Antibody (C-term) - References

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002). Greener, T., et al., J. Biol. Chem. 275(2):1365-1370 (2000). Kimura, S.H., et al., Genomics 44(2):179-187 (1997).