10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# GAK Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8061b

## Product Information

| | |
|---|---|
| **Application** | WB, IHC-P, E |
| **Primary Accession** | O14976 |
| **Other Accession** | P97874 |
| **Reactivity** | Human, Mouse |
| **Predicted** | Rat, Bovine, Canine, Rabbit, Chicken |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB3949/3950 |
| **Calculated MW** | 143191 |
| **Antigen Region** | 1140-1170 |

## 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~~1:100~500 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS. |
| **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. |

## Protein Information

| | |
|---|---|
| **Name** | GAK ( HGNC:4113) |
| **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:10625686). May play a role in clathrin-mediated endocytosis and intracellular trafficking, and in the dynamics of clathrin assembly/disassembly (PubMed:18489706). |
| **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** | Ubiquitous. Highest in testis. |

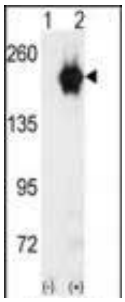
## Background

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.

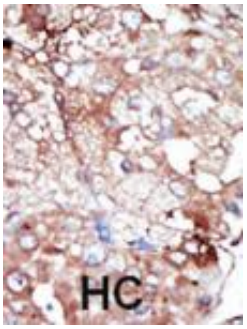
## References

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).

## Images

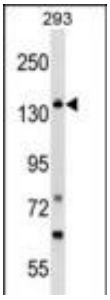


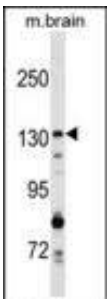

Western blot analysis of GAK (arrow) using GAK Antibody (C-term) (Cat.#AP8061b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the GAK gene (Lane 2) (Origene Technologies).




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 293 cell line lysates (35ug/lane).This demonstrates the GAK antibody detected the GAK protein (arrow).




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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.