

## **Anti-GAK antibody, mouse monoclonal (9-10)**

Catalog # 71-203 100 ul

GAK (Cyclin-G-associated Kinase) a serine/threonine kinase that functions in the uncoating of clathrin-coated vesicles by Hsc70 in non-neuronal cells. Its non-kinase domain is homologous to auxilin that is mainly expressed in neuronal cells. Human GAK consists of 1,311 amino acids with molecular mass of 143 kDa.

### **Applications**

Western blot 1/ 500 dilution

Immunohistochemistry 1/50 dilution

Immunofluorescent staining 1/50 dilution

### **Specifications**

Immunogen: Recombinant rat GAK (kinase domain, 1-430)

Reactivity: human and rat. Not tested for GAK of other species.

Form: cell culture supernatant in PBS, 50% glycerol

Isotype: Mouse IgG

Shipped at 4°C and stored at -20°C

### **Data Link**

UniProtKB O14976 Human, Entrez Gene 2580 Human

### **Reference**

1. Sato J. et al. GAK, a regulator of clathrin-mediated membrane trafficking, localizes not only in the cytoplasm but also in the nucleus. *Genes Cells*. 2009 May; 14(5):627-41. doi: 10.1111/j.1365-2443.2009.01296.x. WB, IF
2. Shimizu H et al. GAK, a regulator of clathrin-mediated membrane traffic, also controls centrosome integrity and chromosome congression. *J Cell Sci*. 2009 Sep 1; 122(Pt 17):3145-52. doi: 10.1242/jcs.052795. WB
3. Sakurai MA et al. Gefitinib and luteolin cause growth arrest of human prostate cancer PC-3 cells via inhibition of cyclin G-associated kinase and induction of miR-630. *PLoS One*. 2014 Jun 27; 9(6):e100124. doi: 10.1371/journal.pone.0100124. WB

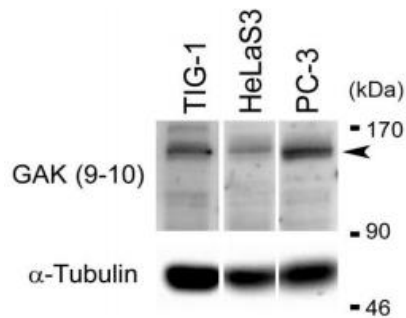


Fig.1 Western blot analysis of endogenous GAK in whole cell extracts of TIG-1, HeLa S3, and PC-3 cells with anti-GAK monoclonal antibody, 9-10. The anti-GAK antibody was used at 1/500 dilution.

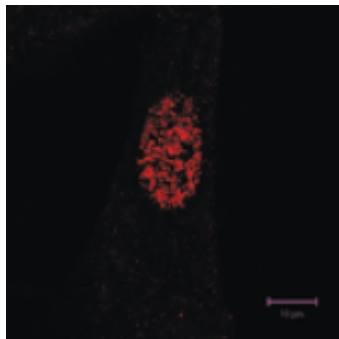


Fig. 2 Immunofluorescence staining of GAK in TIG-1 cells with anti-GAK antibody (9-10). The antibody was used at 1/50 dilution. As the second antibody, Texas-Red conjugated sheep anti-mouse IgG was used.

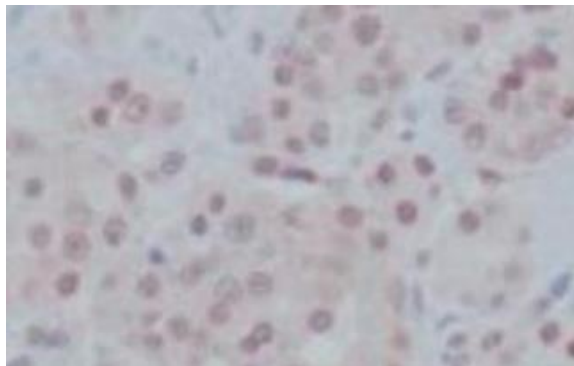


Fig. 3 Immunohistochemical staining of human prostate cancer tissues with anti-GAK antibody (9-10), showing nuclear accumulation of GAK in cancer cells. The anti-GAK antibody was used at 1/50 dilution.