

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

71-203 100 ul

**Storage:** Shipped at  $4^{\circ}\mathbb{C}$  and store at  $-20^{\circ}\mathbb{C}$ .

**Reactivity:** human and rat. Not tested with other species.

**Applications** 

1. Western blotting (1/500)

2. Immunofluorescent staining (1/50)

3. Immunohistochemistry (1/50) Not tested for other applications

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

Form: Cell culture supernatant in PBS, 50% glycerol

Isotype: Mouse IgG

**Background:** 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.

Data Link UniProtKB <u>014976</u> (Human) Entrez Gene <u>2580</u> (Human)

**References:** Usage of this antibody has been described in the following publication.

- (1) Sato J. et al. **GAK**, a regulator of clathrin-mediated membrane trafficking, localizes not only in the cytoplasm but also in the nucleus. <u>Genes Cells.</u> 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. <u>J Cell Sci.</u> 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

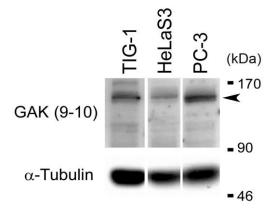


Fig.1 Western blot analysis of endogenous GAK in whole cell extracts of TIG-1, HeLa S3 and PC-3 cells with anti-GAK monoclonal antibody (9-10)

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.

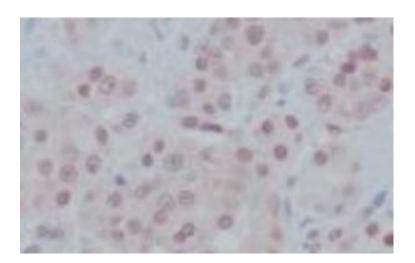


Fig.2 Immunohistochemical staining of human prostate cancer tissues with anti-GAK antibody (9-10), showing nuclear accumulation of GAK in cancer cells. The anti-GAK antibody was used at 1/50 dilution.