

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

71-203 100 µl

**Shipping and Storage:** Shipped at 4°C or -20°C and stored at -20°C.

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

**Form:** Cell culture supernatant in PBS- with 50% glycerol

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

**Isotype:** Mouse IgG

### Applications

1. Western blotting (1/ 500)
2. Immunofluorescent staining (1/50)
3. Immunohistochemistry (1/50)

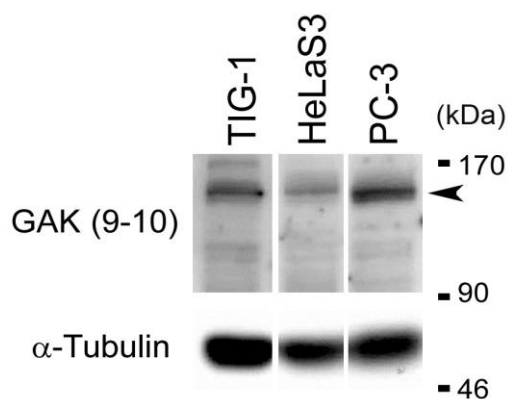
Not tested for other applications

**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 [O14976](#) (Human) Entrez Gene [2580](#) (Human)

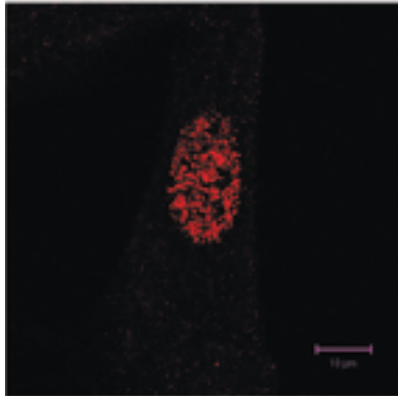
**References:** Usage of this antibody has been described in the following publication.

- (1) Sato J. et al. **GAK**, a regulator of clathrin-mediated membrane trafficking, localizes not only in the cytoplasm but also in the nucleus. [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**



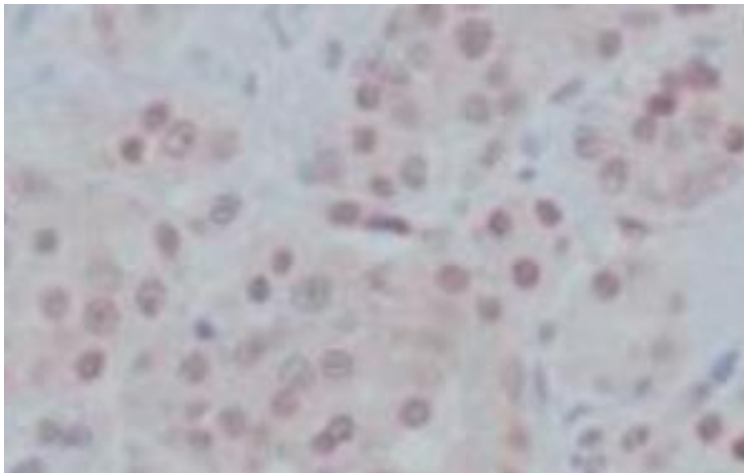
**Fig.1 Western blot analysis of endogenous GAK in whole cell extracts of TIG-1, HeLa S3 and PC-3 cells with anti-GAK monoclonal antibody (9-10)**

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.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.