

Anti-GAK antibody, mouse monoclonal (9-13)

71-200 100 ul

Storage: Shipped at 4°C and store at -20°C.

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

Applications

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

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 [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 (human)**
- (1) 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 (human)**
- (2) 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, IHC-P (human)**

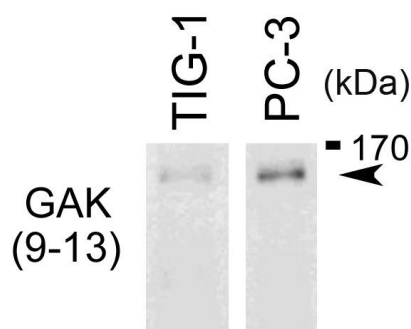


Fig.1 Western blot analysis of endogenous GAK in whole cell extracts of TIG-1 and PC-3 cells with anti-GAK monoclonal antibody, 9-13

The anti-GAK antibody was used at 1/500 dilution.

The image is obtained from Prof. H. Nojima at Osaka University.

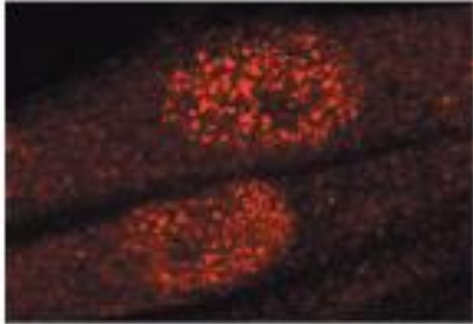


Fig.2 Immunofluorescence staining of GAK in TIG-1 cells with anti-GAK antibody (9-13).
The antibody was used at 1/50 dilution. As the second antibody, Texas-Red conjugated sheep anti-mouse IgG was used.

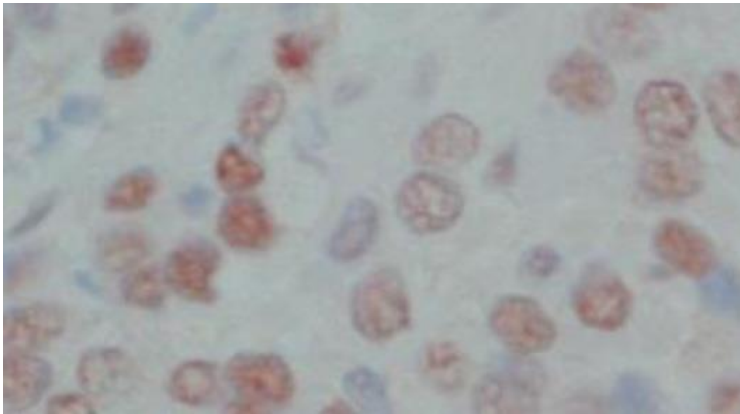


Fig.3 Immunohistochemical staining of human prostate cancer tissues with anti-GAK antibody (9-13), showing nuclear accumulation of GAK in cancer cells.

The anti-GAK antibody was used at 1/50 dilution.