

## Anti-PHLDA3 antibody, mouse monoclonal (4B6)

71-195 100 µg

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

**Immunogen:** Synthetic peptide corresponding to N terminal amino acids 1-31 of human PHLDA3

**Form:** Purified monoclonal antibody (IgG) 1mg/ml in PBS- with 50% glycerol, filter-sterilized

**Isotype:** Mouse IgG2b κ

**Reactivity:** Specific to human PHLDA3. Not tested with other species.

### Applications

1. Western blotting
2. Immunofluorescent staining (1/1,000)

**Background:** PHLDA3 (Pleckstrin homology-like domain family A member 3) is a small PH (Pleckstrin homology) domain-only protein (127 a.a. in human) that is highly conserved in vertebrates. Recently PHLDA3 was found to be a p53-regulated repressor of Akt (ref 2) hence it is speculated as a tumor suppressor. PHLDA3 also inhibits anchorage-independent cell growth. *PHLDA3* gene is frequently lost in human lung endocrine tumors.

**Data Link** UniProtKB/Swiss-Prot [Q9Y5J5](#) (PHLA3\_HUMAN)

### References This antibody has been used in Ref. 2

1. Frank D *et al* (1999) "A novel pleckstrin homology-related gene family defined by Ip1/Tssc3, TDAG51, and Tih1: tissue-specific expression, chromosomal location, and parental imprinting" *Mamm. Genome* **10**:1150-1159 PMID: [10594239](#)
2. Kawase T *et al* (2009) "PH domain-only PHLDA3 is a novel p53-regulated repressor of Akt" *Cell* **136**: 535-550 PMID: [19203586](#)

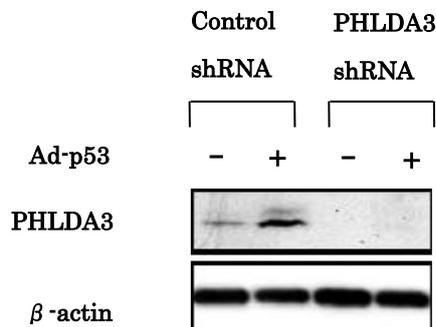
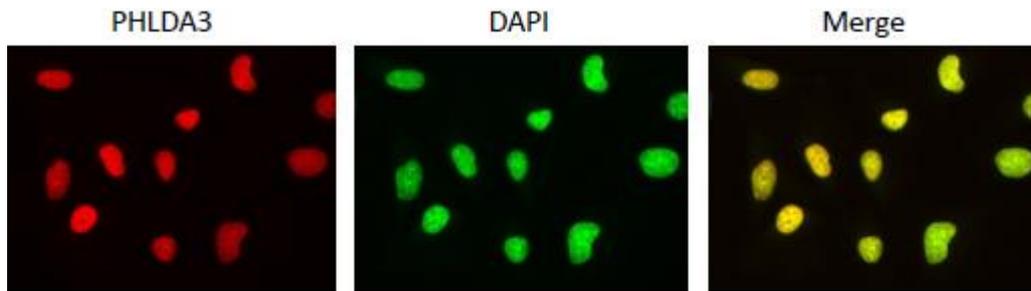


Fig.1 Western blotting was performed using the antibody 4B6 to detect PHLDA3 protein expression. PHLDA3 protein was induced by Ad-p53 in MDA-MB-468 cells (left). PHLDA3 expression was inhibited by shRNA targeting PHLDA3 (right).



**Fig.2 Immunofluorescence staining of PHLDA3 in nuclei of HeLa cells.**

1. HeLa cells were fixed with 4% paraformaldehyde overnight, permeabilized with 0.25% Triton X-100 in PBS for 10 min.
2. Incubate cells with 1.5% BSA in PBS for 30 min to block non-specific binding of the antibodies. Incubate the cells with 1/1,000 diluted anti-PHLDA3 antibody in 1% BSA in PBS at 4°C overnight.
3. Incubate cells with a secondary antibody, goat anti-mouse IgG conjugated with Alex 488, at 1/1,000 dilution in 1% BSA for 1 hr at room temperature.
4. Nucleus (DNA) was stained with DAPI