

Anti-PHLDA3 antibody, mouse monoclonal (4B6)

Product code	71-195
Size	100 µg
Storage	-20°C
Concentration	1.0 mg/ml
Buffer	PBS ⁻ with 50% glycerol
Purity	Purified IgG fraction with protein A from hybridoma cell culture medium.
Immunogen	Synthetic peptide corresponding to N terminal amino acids 1-31 of human PHLDA3.
Isotype	Mouse IgG2bκ
Reactivity	Human PHLDA3. Not tested with other species.
Special notes	N/A
Application	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)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

Data Images: 71-195 Anti-PHLDA3 antibody, mouse monoclonal (4B6)

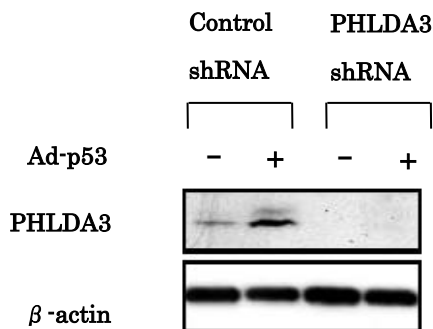


Fig.1 Western blotting was performed using the antibody 4B6 to detect PHLDA3 protein expression. PHLDA3 protein was induced by Ad-p53 in MDA-MB-468 cells (left). PHLDA3 expression was inhibited by shRNA targeting PHLDA3 (right).

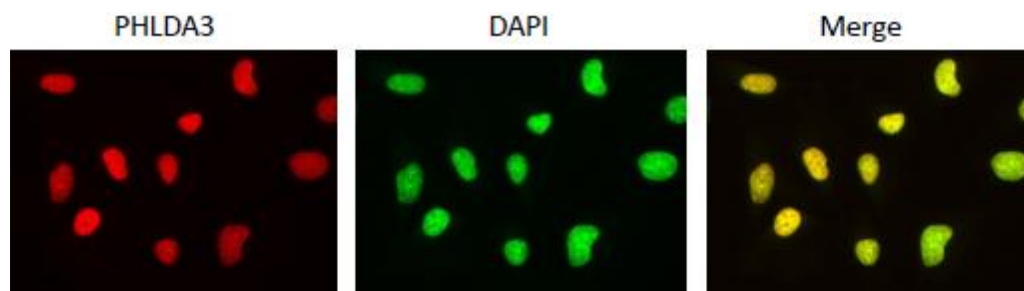


Fig.2 Immunofluorescence staining of PHLDA3 in nuclei of HeLa cells.

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

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](https://pubmed.ncbi.nlm.nih.gov/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](https://pubmed.ncbi.nlm.nih.gov/19203586/)