

# DAB2 Polyclonal antibody

Catalog Number: 10109-2-AP

7 Publications

## Basic Information

### Catalog Number:

10109-2-AP

### Size:

600 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG0162

### GenBank Accession Number:

BC003064

### GeneID (NCBI):

1601

### UNIPROT ID:

P98082

### Full Name:

disabled homolog 2, mitogen-responsive phosphoprotein (Drosophila)

### Calculated MW:

82 kDa

### Observed MW:

96 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:6000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF 1:50-1:500

## Applications

### Tested Applications:

FC, IF/ICC, IHC, IP, WB, ELISA

### Cited Applications:

WB, IP, IF, IHC

### Species Specificity:

human

### Cited Species:

Chicken, human

### Positive Controls:

WB : HeLa cells, MCF-7 cells

IP : HeLa cells,

IHC : human kidney tissue,

IF : HeLa cells,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

DAB2 is a protein of 770 amino acid residues with a predicted molecular weight of 85.5kDa. This gene was initially named DOC2 (for Differentially expressed in Ovarian Cancer) and is distinct from the DOC2A and DOC2B genes (for double C2-like domains, alpha and beta). Human DAB2 has an overall 83% identity with the mouse p96 protein, a putative mitogen-responsive phosphoprotein; homology is strongest in the amino-terminal end of the protein in a region corresponding to the phosphotyrosine interaction domain (PID), and contains multiple SH3 binding motifs. Chromosomal localization by FISH showed that the DAB2 gene is located on 5p13. The expression of DAB2 is down-regulated or absent in all the carcinoma cell lines examined, including prostate and ovarian carcinoma cell lines. The N-terminal domain of DAB2 interacts with Dishevelled-3 (Dvl-3), a signaling mediator of the Wnt pathway. Ectopic expression of DAB2 attenuates canonical Wnt/catenin-mediated signaling, including accumulation of catenin and cyclin D1 induction. DAB2 suppresses both protein kinase C and peptide growth factor-elicited signal pathways via the Ras-mitogen-activated protein kinase pathway. The proline-rich domain of DAB2 also interacts with proteins containing SH3 domain, such as Src and Fgr. The binding of DAB2 to c-Src results in the inactivation of c-Src. All data suggest that DAB2 is a potent tumor suppressor in many cancer types.

## Notable Publications

Author	Pubmed ID	Journal	Application
Minxia Zuo	36330072	J Diabetes Res	WB
Akira Honda	30061390	Proc Natl Acad Sci U S A	IP
María D Vazquez-Carretero	32617970	J Cell Physiol	IF

## Storage

### Storage:

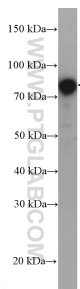
Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

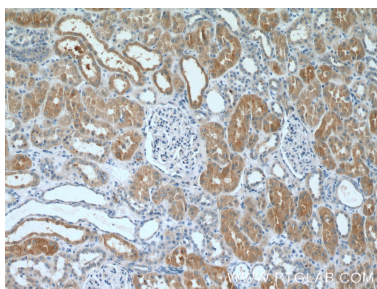
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

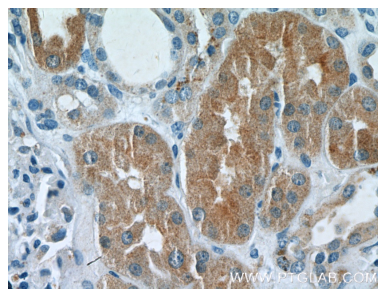
Selected Validation Data



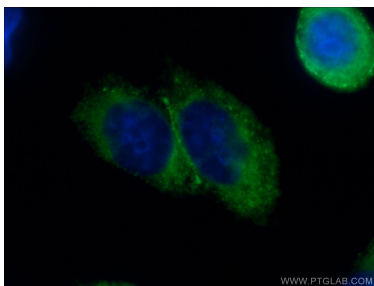
HeLa cells were subjected to SDS PAGE followed by western blot with 10109-2-AP (DAB2 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



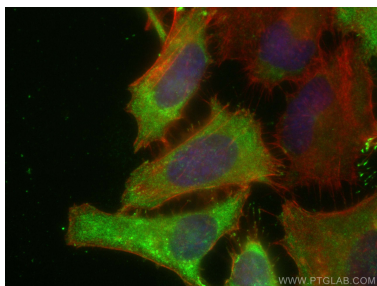
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 10109-2-AP (DAB2 Antibody) at dilution of 1:200 (under 10x lens).



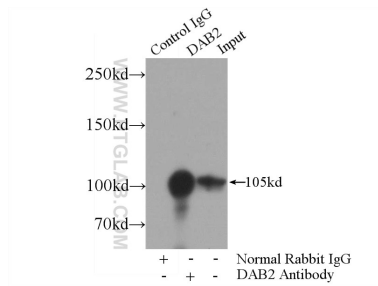
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 10109-2-AP (DAB2 Antibody) at dilution of 1:200 (under 40x lens).



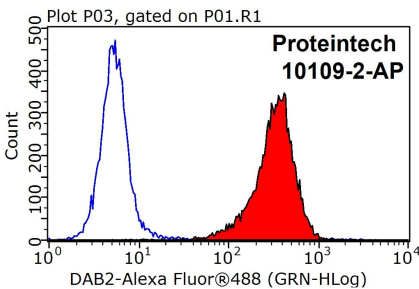
Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using 10109-2-AP (DAB2 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using DAB2 antibody (10109-2-AP) at dilution of 1:200 and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).



IP result of anti-DAB2 (IP:10109-2-AP, 4ug; Detection:10109-2-AP 1:2000) with HeLa cells lysate 4000ug.



1X10<sup>6</sup> HepG2 cells were stained with 0.2ug DAB2 antibody (10109-2-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.