



## FAT1 monoclonal antibody

Catalog: MB67100

Host: Mouse

Reactivity: Human

### BackGround:

FAT1 is a member of the FAT atypical cadherin (FAT) subfamily of cadherin proteins. FAT1 is a single-pass transmembrane protein, first identified in a screen for tumor suppressor proteins in *Drosophila*. FAT1 is expressed primarily in epithelial cells, where it plays a prominent role in regulating cell growth and migration, in large part through the regulation of cell-cell adhesion dynamics. The intracellular cytoplasmic tail of FAT1 contains multiple functional motif/domains that regulate FAT1 functions, including a proline rich EVH1 binding motif that regulates actin cytoskeleton components (e.g., Ena/VASP proteins) at both cell-cell contact points and leading edges of migrating cells. FAT1 appears to play a role in linking cell adhesion events to intracellular signaling pathways. For example, FAT1 was capable of inhibiting the nuclear translocation of  $\beta$ -catenin through its cytoplasmic FC1 domain interaction with  $\beta$ -catenin, and activating the Hippo signaling pathway, suppressing YAP signaling by its N-terminal cytoplasmic region interaction with MST1. Research studies have revealed that the tumor suppressor functions identified in *Drosophila* are conserved in vertebrate FAT1 homologs. For example, studies in human cancer cells showed that loss-of-function mutations in the gene encoding FAT1 promoted a hybrid epithelial-to-mesenchymal transition, which further enabled the development of cancer drug resistance. Notably, studies have also revealed an oncogenic function for FAT1 in some contexts.

### Product:

Mouse IgG1 kappa. Liquid in PBS, pH 7.3, 30% glycerol,

and 0.01% sodium azide.

### Molecular Weight:

~ 506 kDa

### Swiss-Prot:

Q14517

### Purification&Purity:

This antibody is purified through a protein G column.

### Applications:

WB (1/500 - 1/1000)

### Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

### Specificity:

Recognizes endogenous levels of FAT1 protein.

### DATA:



Western blot analysis of FAT1 expression in recombinant protein (A) whole cell lysates.

### Note:

For research use only, not for use in diagnostic procedure.

### Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park, MN 55416, USA.

Email: [info@bioworld.com](mailto:info@bioworld.com)

Tel: 6123263284

Fax: 6122933841

### Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046, P. R. China.

Email: [info@biogol.com](mailto:info@biogol.com)

Tel: 0086-025-68037686

Fax: 0086-025-68035151