

PRODUCT DATA SHEET

Bioworld Technology, Inc.

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 β-catenin through its cytoplasmic FC1 domain interaction with β-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)

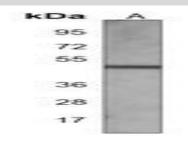
Storage&Stability:

Store at $4\,\mathrm{C}$ short term. Aliquot and store at $-20\,\mathrm{C}$ 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.

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