

FAT1 Antibody (*Drosophila melanogaster*) [clone FAT1-3D7/1] (V7767)

Catalog No.	Formulation	Size
V7767-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7767-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7767SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	<i>Drosophila melanogaster</i>
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgM, kappa
Clone Name	FAT1-3D7/1
Purity	PEG precipitation
UniProt	Q14517
Applications	ELISA (order BSA-free Format For Coating) : Western Blot : 1-2ug/ml Immunofluorescence : 1-2ug/ml
Limitations	This FAT1 antibody is available for research use only.



Description

The FAT proteins are members of the Cadherin superfamily homologous to the *Drosophila* Fat protein that functions as a positive regulator of planar cell polarity in the *Drosophila* wing. FAT1 is an unusual cadherin that controls cell growth and planar polarity while acting as a tumor suppressor. FAT1 is a proximal element of a signaling pathway that determines both cellular polarity in the plane of the monolayer and directed actin-dependent cell motility. FAT1 is localized at the leading edge of lamellipodia, filopodia and microspike tips where it directly interacts with Ena/VASP proteins to regulate the actin polymerization complex. When targeted to mitochondrial outer leaflets, the cytoplasmic domain of FAT1 recruits components of the actin polymerization machinery sufficient to induce ectopic actin polymerization. FAT1 expression in vascular smooth muscle cells (VSMCs) increases significantly after arterial injury or growth factor stimulation, implicating FAT1 in the control of VSMC functions central to vascular remodeling by facilitating migration and limiting proliferation. FAT1 is also involved in psychic disorders, and its action may be of patho-physiological importance.

Application Notes

Optimal dilution of the FAT1 antibody should be determined by the researcher.

Immunogen

The cytoplasmic domain of *Drosophila* Fat protein was used as the immunogen for the FAT1 antibody.

Storage

Store the FAT1 antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).