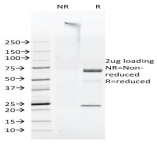
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FAT1 Monoclonal Mouse Antibody (FAT1-3D7/1)



Product 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 psychiatric disorders, and its action may be of pathophysiological importance.

This antibody is available purified, with BSA and azide (0.2 mg/mL) or purified, BSA- and azide-free (1 mg/mL).

We do not offer IgM antibodies conjugated to CF® Dyes or biotin due to limited stability of the conjugate during the purification and storage. However, it is possible to do a conjugation yourself using a Mix-n-Stain™ CF® Dye IgM Antibody Labeling Kit.

Product attributes

Antibody number	#2322
Antibody reactivity (target)	FAT1
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	FAT1-3D7/1
Isotype	IgM, kappa
Molecular weight of antigen	500 kDa
Synonyms	Cadherin family member 7 precursor (CDHF7); Cadherin ME5; Cadherin related tumor suppressor homolog precursor (FAT protein homolog); FAT tumor suppressor homolog 1; hFat 1; Homolog of Drosophila tumor suppressor FAT precursor; nuclear form; Protein fat homolog; Protocadherin Fat 1
Human gene symbol	FAT1
Entrez gene ID	2195
SwissProt	Q14517
Unigene	481371
Immunogen	Cytoplasmic domain of Drosophila Fat protein.
Antibody target cellular localization	Nucleus & cytoplasm
Species reactivity	Drosophila
Antibody application notes	For coating for ELISA, order Ab without BSA, Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Optimal dilution and staining procedure for a specific application should be determined by user, Recommended starting concentrations for titration are 1-2 ug/mL for most applications, or 1 ug/million cells/100 uL for flow cytometry
Positive control	Wild type imaginal discs from third instar Drosophila larvae.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.