

Fukutin Rabbit mAb

Catalog # AP78765

Product Information

Application WB, IHC-P **Primary Accession** 075072

Reactivity Rat, Human, Mouse

Host Rabbit

Clonality Monoclonal Antibody

Isotype IgG

Conjugate Unconjugated

Immunogen A synthesized peptide derived from human Fukutin

Purification Affinity Chromatography

Calculated MW 53724

Additional Information

Gene ID 2218

Other Names FKTN

Dilution WB~~1/500-1/1000 IHC-P~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

Protein Information

Name FKTN (HGNC:3622)

Function Catalyzes the transfer of a ribitol-phosphate from CDP- ribitol to the distal

N-acetylgalactosamine of the phosphorylated O- mannosyl trisaccharide

(N-acetylgalactosamine-beta-3-N-

acetylglucosamine-beta-4-(phosphate-6-)mannose), a carbohydrate structure present in alpha-dystroglycan (DAG1) (PubMed:<u>26923585</u>, PubMed:<u>27194101</u>, PubMed:<u>29477842</u>). This constitutes the first step in the formation of the ribitol 5-phosphate tandem repeat which links the phosphorylated

O-mannosyl trisaccharide to the ligand binding moiety composed of repeats

of 3-xylosyl-alpha-1,3-glucuronic acid-beta-1 (PubMed:<u>17034757</u>, PubMed:<u>25279699</u>, PubMed:<u>26923585</u>, PubMed:<u>27194101</u>,

PubMed:<u>29477842</u>). Required for normal location of POMGNT1 in Golgi membranes, and for normal POMGNT1 activity (PubMed:<u>17034757</u>). May interact with and reinforce a large complex encompassing the outside and inside of muscle membranes (PubMed:<u>25279699</u>). Could be involved in brain

development (Probable).

Cellular Location

Golgi apparatus membrane; Single-pass type II membrane protein. Cytoplasm

{ECO:0000250 | UniProtKB:Q8R507}. Nucleus

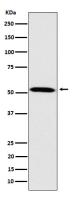
{ECO:0000250|UniProtKB:Q8R507}. Note=In retinal tissue, does not localize

with the Golgi apparatus. {ECO:0000250 | UniProtKB:Q8R507}

Tissue Location

Expressed in the retina (at protein level) (PubMed:29416295). Widely expressed with highest expression in brain, heart, pancreas and skeletal muscle (PubMed:11115853). Expressed at similar levels in control fetal and adult brain (PubMed:11115853) Expressed in migrating neurons, including Cajar-Retzius cells and adult cortical neurons, as well as hippocampal pyramidal cells and cerebellar Purkinje cells (PubMed:11115853). No expression observed in the glia limitans, the subpial astrocytes (which contribute to basement membrane formation) or other glial cells (PubMed:11115853)

Images



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