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# Fukutin Antibody

Rabbit mAb
Catalog # AP92729

## Product Information

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| **Application** | WB, IHC |
| **Primary Accession** | O75072 |
| **Reactivity** | Rat, Human, Mouse |
| **Clonality** | Monoclonal |
| **Other Names** | CMD1X; FCMD; FKTN; Fukutin; LGMD2M; MDDGA4; MDDGB4; MDDGC4; |
| **Isotype** | Rabbit IgG |
| **Host** | Rabbit |
| **Calculated MW** | 53724 |

## Additional Information

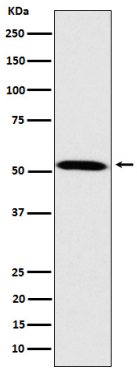
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| **Dilution** | WB 1:500~1:2000 IHC 1:50~1:200 |
| **Purification** | Affinity-chromatography |
| **Immunogen** | A synthesized peptide derived from human Fukutin |
| **Description** | May be a glycosyltransferase which participates in glycosylation of alpha-dystroglycan/DAG1. May interact with and reinforce a large complex encompassing the outside and inside of muscle membranes. Could be involved in brain development. |
| **Storage Condition and Buffer** | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

## Protein Information

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| **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:26923585, PubMed:27194101, PubMed:29477842). 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:17034757, PubMed:25279699, PubMed:26923585, PubMed:27194101, PubMed:29477842). Required for normal location of POMGNT1 in Golgi membranes, and for normal POMGNT1 activity (PubMed:17034757). May interact with and reinforce a large complex encompassing the outside and inside of muscle membranes (PubMed:25279699). Could be involved in brain development (Probable). |

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| **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




Western blot analysis of Fukutin expression in HeLa cell lysate.

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