

Myotubularin Polyclonal Antibody

Catalog # AP71135

Product Information

Application WB Primary Accession Q13496

Reactivity Human, Mouse

HostRabbitClonalityPolyclonalCalculated MW69932

Additional Information

Gene ID 4534

Other Names MTM1; CG2; Myotubularin

Dilution WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other

applications.

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

Protein Information

Name MTM1 (HGNC:7448)

Synonyms CG2

Function Lipid phosphatase which dephosphorylates phosphatidylinositol

3-monophosphate (PI3P) and phosphatidylinositol 3,5-bisphosphate (PI(3,5)P2) (PubMed:10900271, PubMed:11001925, PubMed:12646134,

PubMed: 14722070). Has also been shown to dephosphorylate

phosphotyrosine- and phosphoserine-containing peptides (PubMed:<u>9537414</u>). Negatively regulates EGFR degradation through regulation of EGFR trafficking from the late endosome to the lysosome (PubMed:<u>14722070</u>). Plays a role in vacuolar formation and morphology. Regulates desmin intermediate filament assembly and architecture (PubMed:<u>21135508</u>). Plays a role in mitochondrial morphology and positioning (PubMed:<u>21135508</u>). Required for skeletal muscle maintenance but not for myogenesis (PubMed:<u>21135508</u>). In skeletal

muscles, stabilizes MTMR12 protein levels (PubMed:23818870).

Cellular Location Cytoplasm. Cell membrane; Peripheral membrane protein. Cell projection,

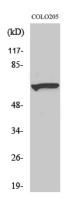
filopodium. Cell projection, ruffle. Late endosome. Cytoplasm, myofibril, sarcomere {ECO:0000250|UniProtKB:Q9Z2C5}. Note=Localizes as a dense

cytoplasmic network (PubMed:11001925). Also localizes to the plasma membrane, including plasma membrane extensions such as filopodia and ruffles (PubMed:12118066). Predominantly located in the cytoplasm following interaction with MTMR12 (PubMed:12847286). Recruited to the late endosome following EGF stimulation (PubMed:14722070). In skeletal muscles, co-localizes with MTMR12 in the sarcomere (By similarity) {ECO:0000250 | UniProtKB:Q9Z2C5, ECO:0000269 | PubMed:11001925, ECO:0000269 | PubMed:12118066, ECO:0000269 | PubMed:12847286, ECO:0000269 | PubMed:14722070}

Background

Lipid phosphatase which dephosphorylates phosphatidylinositol 3-monophosphate (PI3P) and phosphatidylinositol 3,5-bisphosphate (PI(3,5)P2) (PubMed:11001925, PubMed:10900271, PubMed:12646134, PubMed:14722070). Has also been shown to dephosphorylate phosphotyrosine- and phosphoserine-containing peptides (PubMed:9537414). Negatively regulates EGFR degradation through regulation of EGFR trafficking from the late endosome to the lysosome (PubMed:14722070). Plays a role in vacuolar formation and morphology. Regulates desmin intermediate filament assembly and architecture (PubMed:21135508). Plays a role in mitochondrial morphology and positioning (PubMed:21135508). Required for skeletal muscle maintenance but not for myogenesis (PubMed:21135508). In skeletal muscles, stabilizes MTMR12 protein levels (PubMed:23818870).

Images



Western Blot analysis of various cells using Myotubularin Polyclonal Antibody diluted at 1:500

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.