

Anti-CYFIP1 Rabbit Monoclonal Antibody

Catalog # ABO16389

Specification

Anti-CYFIP1 Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Host Isotype Reactivity Clonality Format Description WB, IF, ICC, FC <u>07L576</u> Rabbit IgG Rat, Human, Mouse Monoclonal Liquid

Anti-CYFIP1 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-CYFIP1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 23191

Other Names Cytoplasmic FMR1-interacting protein 1, Specifically Rac1-associated protein 1, Sra-1, p140sra-1, CYFIP1 (HGNC:13759)

Calculated MW 130 kDa KDa

Application Details WB 1:500-1:2000
ICC/IF 1:50-1:200
FC 1:50

Contents Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human CYFIP1

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-CYFIP1 Rabbit Monoclonal Antibody - Protein Information



Name CYFIP1 (HGNC:13759)

Function

Component of the CYFIP1-EIF4E-FMR1 complex which binds to the mRNA cap and mediates translational repression. In the CYFIP1-EIF4E- FMR1 complex this subunit is an adapter between EIF4E and FMR1. Promotes the translation repression activity of FMR1 in brain probably by mediating its association with EIF4E and mRNA (By similarity). Regulates formation of membrane ruffles and lamellipodia. Plays a role in axon outgrowth. Binds to F-actin but not to RNA. Part of the WAVE complex that regulates actin filament reorganization via its interaction with the Arp2/3 complex. Actin remodeling activity is regulated by RAC1. Regulator of epithelial morphogenesis. As component of the WAVE1 complex, required for BDNF-NTRK2 endocytic trafficking and signaling from early endosomes (By similarity). May act as an invasion suppressor in cancers.

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q7TMB8}. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:Q7TMB8}. Cell projection, lamellipodium {ECO:0000250|UniProtKB:Q7TMB8}. Cell projection, ruffle {ECO:0000250|UniProtKB:Q7TMB8}. Synapse, synaptosome {ECO:0000250|UniProtKB:Q7TMB8}. Note=Highly expressed in the perinuclear region (By similarity). Enriched in synaptosomes (By similarity). Also enriched in membrane ruffles and at the tips of lamellipodia (By similarity). {ECO:0000250|UniProtKB:Q7TMB8}

Anti-CYFIP1 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-CYFIP1 Rabbit Monoclonal Antibody - Images



Figure 1. Western blot analysis of CYFIP1 using anti-CYFIP1 antibody (M04596).



Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

- Lane 2: human SH-SY5Y whole cell lysates,
- Lane 3: human U20S whole cell lysates,
- Lane 4: human U251 whole cell lysates,
- Lane 5: rat brain tissue lysates,
- Lane 6: rat C6 whole cell lysates,
- Lane 7: mouse brain tissue lysates,
- Lane 8: mouse Neuro-2a whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CYFIP1 antigen affinity purified monoclonal antibody (Catalog # M04596) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CYFIP1 at approximately 145 kDa. The expected band size for CYFIP1 is at 145 kDa.