For Research Use Only

## MAP7D1 Recombinant antibody, PBS Only (Capture)

Catalog Number:83173-1-PBS



**Basic Information** 

Catalog Number: GenBank Accession Number:

83173-1-PBS BC003083

Size: GenelD (NCBI): 100ug, Concentration: 1mg/ml by 55700

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Nanodrop; UNIPROT ID:
Source: Q3KQU3
Rabbit Full Name:

Isotype: MAP7 domain containing 1

IgG Calculated MW:
Immunogen Catalog Number: 841 aa, 93 kDa
AG14385 Observed MW:
120-130 kDa

CloneNo.: 230424A6

**Purification Method:** 

Protein A purification

Applications

**Tested Applications:** 

WB, IF/ICC, Cytometric bead array, Indirect ELISA

Species Specificity:

human

**Product Information** 

83173-1-PBS targets MAP7D1 as part of a matched antibody pair:

MP00212-2: 83173-1-PBS capture and 83173-3-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

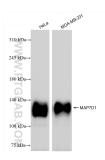
## **Background Information**

MAP7D1 also known as RPRC1, PARCC1, belongs to the MAP7 family. The MAP7 (Microtubule Associated Protein 7) protein family, consisting of four members, MAP7, MAP7D1, and MAP7D2, MAP7D3, is the microtubule-associated protein involved in various cellular processes regulating microtubule dynamics, organization, and stability(PMID: 28980356). MAP7D1 exhibits the highest conservation with MAP7 and was recently identified as a phosphorylation substrate of DCLK1 in cortical neurons. MAP7D1 is required to maintain MT acetylation, which is enriched in stable MTs(PMID: 35470240). Consistent with the literature, the apparent molecular mass of MAP7D1 detected by Western blot was 120-130 kDa (PMID: 35470240, 37550720).

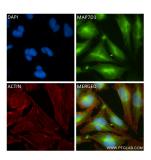
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

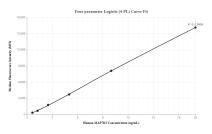
## **Selected Validation Data**



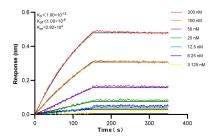
Various lysates were subjected to SDS PAGE followed by western blot with 83173-1-RR (MAP7D1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83173-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed U-251 cells using MAP7D1 antibody (83173-1-RR, Clone: 230424A6) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 83173-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00212-2, MAP7D1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83173-1-PBS. Detection antibody: 83173-3-PBS. Standard: Ag14385. Range: 0.625-20 ng/mL



Biolayer interferometry (BLI) kinetic assays of 83173-1-RR against Human MAP7D1 were performed. The affinity constant is below 1 pM.