For Research Use Only

CoraLite® Plus 488-conjugated MAP2 Polyclonal antibody



Purification Method:

IF-P: 1:50-1:500

wavelengths:

493 nm / 522 nm

100 µl suspension

Antigen affinity purification

Excitation/Emission maxima

FC (Intra): 0.40 ug per 10⁶ cells in a

Recommended Dilutions:

Catalog Number:CL488-17490 1 Publications

Basic Information

Catalog Number: CL488-17490 Concentration:

1000 ug/ml Source: Rabbit

Isotype:

Immunogen Catalog Number: AG11580

Observed MW:

GenBank Accession Number:

BC038857 GeneID (NCBI): 4133 **UNIPROT ID:**

P11137

Full Name: microtubule-associated protein 2

Calculated MW: 200 kDa

Positive Controls:

IF-P: rat brain tissue. FC (Intra): Neuro-2a cells,

Applications

Tested Applications: IF-P, FC (Intra) Species Specificity: human, mouse, rat Cited Species: mouse

Background Information

MAP2 (microtubule-associated protein 2) is a cytoskeleton protein abundant in brain and has important role in neuronal morphogenesis. Multiple high MW and low MW MAP2 isoforms are expressed within proximal segment of axons, dendrites, and cell bodies. The expression of MAP2 is regulated in both a tissue- and developmentally specific manner. The 280 kDa MAP2B is present throughout rat brain development, and the slightly larger MAP2A appears first during the end of the second week of postnatal life. MAP2C, composed of several bands of about 70 kDa, is present during early brain development, and largely disappears from the mature brain except for the retina, olfactory bulb, and cerebellum. In addition, some isoforms with lower MW around 50-60 kDa also exist. MAP2 antibodies have been widely used to mark the neuron or dendrite formation. This antibody can recognize both high MW and low MW isoforms of MAP2.

Notable Publications

Author	Pubmed ID	Journal	Application
Korrapati V Sathyasaikumar	35204197	Antioxidants (Basel)	

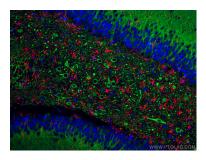
Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

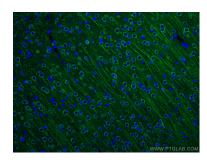
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

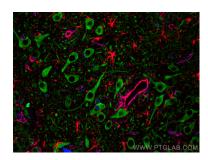
Selected Validation Data



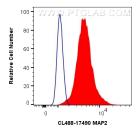
Immunofluorescent analysis of (4% PFA) fixed rat brain tissue using Coralite® Plus 488 MAP2 antibody (CL488-17490) at dilution of 1:200, Coralite®594 GFAP antibody (CL594-16825, red). DAPI (blue).



Immunofluorescent analysis of (4% PFA) fixed rat brain tissue using CoraLite® Plus 488 MAP2 antibody (CL488-17490) at dilution of 1:200. DAPI (blue).



Immunofluorescent analysis of (4% PFA) fixed rat brain tissue using CoraLite® Plus 488 MAP2 antibody (CL488-17490) at dilution of 1:200, CoraLite® 594 GFAP antibody (CL594-60190, Clone: 4B2E10, red), CoraLite® Plus 647 Aquaporin 4 antibody (CL647-16473, Magenta).



1X10^6 Neuro-2a cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human MAP2 (CL488-17490) (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).