For Research Use Only

CoraLite® Plus 488-conjugated TUBB3-specific/TUJ1 Monoclonal antibody



Catalog Number: CL 488-66375

Basic Information

Catalog Number: GenBank Accession Number: Purification Method: CL488-66375 NM_001197181 Protein G purification Size: GeneID (NCBI): CloneNo.: 1000 μ g/ml 10381 1F8G10 Source: Full Name: Recommended Dilutions:

 Mouse
 tubulin, beta 3
 WB 1:1000-1:6000

 Isotype:
 Calculated MW:
 IF-P 1:50-1:500

 IgG1
 55 kDa
 Excitation/Emission n

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

Applications

Tested Applications:

IF/ICC, WB

WB: Neuro-2a cells,
Species Specificity:

IF-P: mouse brain tissue, mouse spine, mouse cerebellum tissue, mouse testis tissue

Background Information

TUBB3, the class III $\,eta\,$ tubulin or Tuj1, is selectively expressed in testis and neurons of the central and peripheral nervous system. It has been widely used as a marker for neurons. Aberrant expression of TUBB3 has also been found in various tumors of non-neural origin and can be used as a biomarker for cancer aggressiveness and a marker for the tendency to respond poorly to chemotherapy. This antibody is specific to TUBB3 but not cross-react with other tubulin isoforms. And the antibody is conjugated with CL488, Ex/Em 488 nm/515 nm.

Storage

Storage:

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

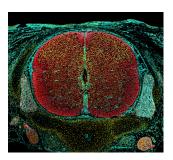
Storage Buffer:

human, mouse, rat

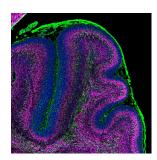
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

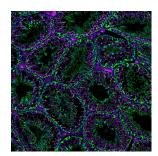
Selected Validation Data



E14.5 FFPE mouse spine stained for beta-III tubulin (red, Cat. No CL488-66375) and GFAP (cyan, Cat. No 60190-1-Ig). Beta-III tubulin stains neurons and was conjugated to CoraLite-488 fluorescent dye and pseudocolored to red. GFAP stains astrocytes along the spinal column. In this image, astrocyte projections can be seen among spinal neurons in the spinal cord. Image credit: @Immunofluorescence on Instagram.

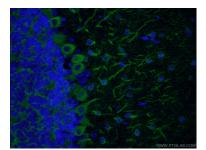


Neonatal mouse cerebellum stained for beta-III tubulin (magenta, Cat. No CL488-66375) and GFAP (green, Cat. No 60190-1-1g). Beta-III tubulin stains neurons and was conjugated to CoraLite-488 fluorescent dye and pseudocolored to magenta. GFAP stains astrocytes. In this image, astrocyte projections can be seen intermingling with neurons. Image credit: @Immunofluorescence on Instagram.

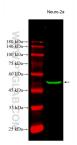


Adult mouse testes were co-stained with TUBB3 (CL488-66375, in green), DDX4/VASA (51042-1-AP, in magenta), and PCNA (60097-1-Ig, in blue). TUBB3/Beta III tubulin marks the Sertoli cells (structural support cells), VASA marks the germ cells (developing sperm), and PCNA marks proliferating cells (these cells are at the base of the tubule, where the sperm stem cells are located). The image was created in paid partnership with @Immunofluorescence on Instagram.





Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using CL488-66375 (TUBB3-specific antibody) at dilution of 1:50.



Neuro-2a cell lysates were subjected to SDS PAGE followed by western blot with CL488-66375 (TUBB3-specific antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.