### For Research Use Only

# CoraLite® Plus 488-conjugated Alpha Tubulin Monoclonal antibody



Catalog Number: CL488-66031

Featured Product

5 Publications

GenBank Accession Number:

**Basic Information** 

Catalog Number: CL488-66031 Concentration: 1000 ug/ml Source: Mouse

Isotype: lgG2b

Immunogen Catalog Number:

AG18034

tubulin, alpha 1b

Calculated MW: 50 kDa

> Observed MW: 50-55 kDa

BC009314

10376

P68363

GeneID (NCBI):

**UNIPROT ID:** 

Full Name:

**Purification Method:** 

Protein A purification

CloneNo.: 1E4C11

Recommended Dilutions:

WB: 1:300-1:600 IF/ICC: 1:50-1:500

FC (Intra): 0.40 ug per 10^6 cells in a

100 µl suspension

Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

**Applications** 

**Tested Applications:** WB, IF/ICC, FC (Intra) Cited Applications:

IF

Species Specificity: human, mouse, rat, canine

Cited Species: human, mouse

WB: HepG2 cells, HeLa cells, HEK-293 cells, HSC-T6

cells, NIH/3T3 cells IF/ICC: HeLa cells,

FC (Intra): HeLa cells,

## **Background Information**

There are five tubulins in human cells: alpha, beta, gamma, delta, and epsilon. Tubulins are conserved across species. They form heterodimers, which multimerize to form a microtubule filament. An alpha and beta tubulin heterodimer is the basic structural unit of microtubules. The heterodimer does not come apart once formed. The alpha and beta tubulins, which are each about 55 kDa MW, are homologous but not identical. Alpha tubulin is useful for scientists across fields as an internal control due to its high, ubiquitous expression pattern. Tubulin expression may vary according to resistance to antimicrobial and antimitotic drugs. This anitbody is CL488(Ex/Em 488 nm/515 nm) conjugated.

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Xueguang Zhang	31571197	Clin Genet	
Chuan Jiang	33968654	Transl Androl Urol	IF
Fei Chen	39069826	Am J Physiol Cell Physiol	IF

# Storage

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

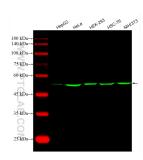
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

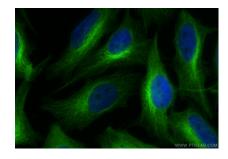
#### Selected Validation Data



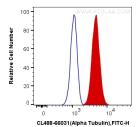
E14.5 FFPE mouse embryo section stained for smooth muscle actin (red, Cat. No 80008-1-RR) and alpha tubulin (green, Cat. CL488-66031). The alpha tubulin was conjugated to CoraLite-488 fluorescent dye. In red, you can see muscle tissue clearly stained including the tongue, heart, and arteries. Nerves and neurons are stained green since they are rich in tubulin. Image credit:
@Immunofluorescence on Instagram



Various lysates were subjected to SDS PAGE followed by western blot with CL488-66031 (Alpha Tubulin antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CoraLite® Plus 488 Alpha Tubulin antibody (CL488-66031, Clone: 1E4C11) at dilution of 1:200



1X10^6 HeLa cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human Alpha Tubulin (CL488-66031, Clone:1E4C11) (red), or 0.4 ug Mouse IgG2b Isotype Control (CL488-66360-3, Clone: K11B8C4B5) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).