

For Research Use Only

# CoraLite® Plus 488-conjugated Tuberin/TSC2 Polyclonal antibody



Catalog Number:CL488-24601

## Basic Information

|   |  |   |
|---|--|---|
| <b>Catalog Number:</b><br>CL488-24601       | <b>GenBank Accession Number:</b><br>BC150300 | <b>Purification Method:</b><br>Antigen affinity purification          |
| <b>Size:</b><br>1000 µg/ml                  | <b>GeneID (NCBI):</b><br>7249                | <b>Recommended Dilutions:</b><br>IF 1:50-1:500                        |
| <b>Source:</b><br>Rabbit                    | <b>UNIPROT ID:</b><br>P49815                 | <b>Excitation/Emission maxima<br/>wavelengths:</b><br>493 nm / 522 nm |
| <b>Isotype:</b><br>IgG                      | <b>Full Name:</b><br>tuberous sclerosis 2    |   |
| <b>Immunogen Catalog Number:</b><br>AG18133 | <b>Calculated MW:</b><br>1807 aa, 201 kDa    |   |
|   | <b>Observed MW:</b><br>200 kDa               |   |

## Applications

|   |  |
|---|--|
| <b>Tested Applications:</b><br>IF/ICC, FC (Intra) | <b>Positive Controls:</b><br>IF : HEK-293 cells, |
| <b>Species Specificity:</b><br>human, mouse , rat |  |

## Background Information

TSC2, also named as TSC4, FLJ43106 and LAM, acts as a GTPase-activating protein (GAP) for the small GTPase RHEB, a direct activator of the protein kinase activity of mTORC1. In complex with TSC1, TSC2 inhibits the nutrient-mediated or growth factor-stimulated phosphorylation of S6K1 and EIF4EBP1 by negatively regulating mTORC1 signaling. TSC2 implicated as a tumor suppressor. It is involved in microtubule-mediated protein transport, but this seems to be due to unregulated mTOR signaling. TSC2 stimulates weakly the intrinsic GTPase activity of the Ras-related proteins RAP1A and RAB5 in vitro. Mutations in TSC2 lead to constitutive activation of RAP1A in tumors. Mutations in either TSC2 or the related TSC1 (hamartin) gene cause tuberous sclerosis complex (TSC), an autosomal dominant disorder characterized by development of multiple, widespread non-malignant tumors.

## Storage

**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.  
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

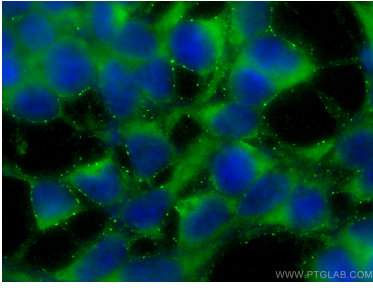
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

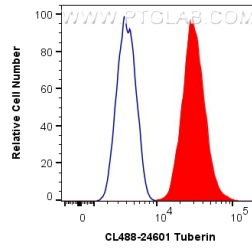
W: [ptgcn.com](http://ptgcn.com)

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## Selected Validation Data



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using CoraLite® Plus 488 Tuberin/TSC2 antibody (CL488-24601) at dilution of 1:200.



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human Tuberin/TSC2 (CL488-24601) (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).