For Research Use Only

## CoraLite®594-conjugated SUMO2/3 Monoclonal antibody

www.ptglab.com

**Purification Method:** 

Protein A purification

Recommended Dilutions:

Excitation/Emission maxima

IF/ICC 1:50-1:500

wavelengths: 588 nm / 604 nm

CloneNo.:

1A1B3

Catalog Number: CL594-67154

Featured Product

**Basic Information** 

Catalog Number: GenBank Accession Number:

CL594-67154 BC008450 GeneID (NCBI):

100ul, Concentration: 1000 ug/ml by 6613

Nanodrop: **UNIPROT ID:** P61956 Mouse

Full Name: Isotype: SMT3 suppressor of mif two 3 lgG2b homolog 2 (S. cerevisiae)

Immunogen Catalog Number: Calculated MW:

AG28672 11 kDa

> Observed MW: 18 kDa

**Applications** 

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

Species Specificity: human, mouse, rat

Positive Controls:

IF/ICC: HeLa cells,

## **Background Information**

 $Ubiquitin\ is\ most\ famous\ for\ its\ function\ in\ targeting\ proteins\ for\ degradation\ by\ the\ 26S\ proteasome,\ ubiquitin$ needs to be attached to a substrate in chains (polyubiquitylation) before being recognized by proteasome. Similarly, SUMO (small ubiquitin-related modifier) can be linked to substrates in chains (polysumoylation), SUMO modification has been implicated in many important cellular processes including the control of genome stability, signal transduction, targeting to and formation of nuclear compartments, cell cycle and meiosis. There are 4 confirmed SUMO isoforms in human, SUMO-1, SUMO-2, SUMO-3 and SUMO-4. SUMO-2 and SUMO-3 are nearly  $identical\ but\ are\ distinct\ from\ SUMO-1.\ SUMO2/3\ conjugation\ was\ recently\ widely\ involved\ in\ neuroprotective$ activities. A substitution (M55V) of SUMO 4 was strongly associated with the pathogenesis of type 1 diabetes (T1D) involving NF kappa B related mechanisms.

Storage

Storage:

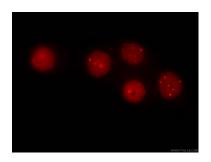
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

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

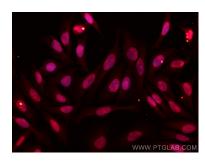
Aliquoting is unnecessary for -20°C storage

in USA), or 1(312) 455-8498 (outside USA)

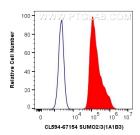
## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CL594-67154 (SUMO 2/3 antibody) at dilution of 1:100.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CoraLite® 594 SUMO 2/3 antibody (CL594-67154, Clone: 1A1B3) at dilution of 1:200.



1X10^6 HeLa cells were intracellularly stained with 0.4 ug CoraLite® 594 Anti-Human SUMO2/3 (CL594-67154, Clone:1A1B3) (red), or 0.4 ug Isotype Control. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).