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## CoraLite® Plus 488-conjugated SUMO1 Monoclonal antibody

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Catalog Number: CL488-67559

**Basic Information** 

Catalog Number: GenBank Accession Number:

CL488-67559 BC006462 GeneID (NCBI):

100ul, Concentration: 1000 ug/ml by 7341 Nanodrop: **UNIPROT ID:** P63165

Mouse Full Name: Isotype: SMT3 suppressor of mif two 3

homolog 1 (S. cerevisiae) lgG1 Immunogen Catalog Number: Calculated MW:

AG29402 12 kDa

Observed MW: 15-100 kDa

**Applications** 

**Tested Applications:** 

Species Specificity: human, mouse, rat

Excitation/Emission maxima wavelengths:

CloneNo.:

3B5B5

**Purification Method:** 

Protein G purification

Recommended Dilutions:

IF/ICC 1:50-1:500

493 nm / 522 nm

Positive Controls:

IF/ICC: MCF-7 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. This antibody can detect endogenous levels of SUMOylated proteins (e.g. SUMO-1-RanGAP at 80-90 kD).

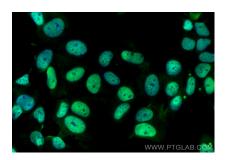
Storage

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

## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using Coralite® Plus 488 SUMO1 antibody (CL488-67559, Clone: 3B5B5) at dilution of 1:200.