For Research Use Only

CoraLite® Plus 488-conjugated SUMO1 Polyclonal antibody

Catalog Number: CL488-10329



Basic Information

Catalog Number: GenBank Accession Number:

CL488-10329 BC006462 GeneID (NCBI):

Nanodrop: **UNIPROT ID:** P63165 Rabbit

100ul, Concentration: 1000 ug/ml by 7341

Isotype: SMT3 suppressor of mif two 3 homolog 1 (S. cerevisiae) IgG

Immunogen Catalog Number: Calculated MW: 12 kDa AG0414

> Observed MW: 10-12 kDa, 80-90 kDa

Full Name:

Purification Method: Antigen affinity purification Recommended Dilutions: IF/ICC 1:200-1:800

Excitation/Emission maxima wavelengths: 493 nm / 522 nm

Applications

Tested Applications: IF/ICC, FC (Intra)

Species Specificity: human, mouse, rat

Positive Controls:

IF/ICC: A549 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

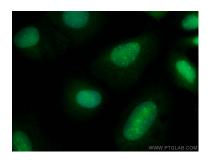
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

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

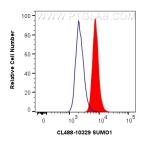
Aliquoting is unnecessary for -20°C storage

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

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed A549 cells using CoraLite® Plus 488 SUMO 1 antibody (CL488-10329) at dilution of 1:400.



1X10^6 A549 cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human SUMO 1 (CL488-10329) (red), or 0.4 ug Control Antibody. Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.