

CoraLite® Plus 488-conjugated SUMO1 Monoclonal antibody

Catalog Number: **CL488-67559**

Basic Information

Catalog Number: CL488-67559	GenBank Accession Number: BC006462	Purification Method: Protein G purification
Size: 1000 µg/ml	GeneID (NCBI): 7341	CloneNo.: 3B5B5
Source: Mouse	UNIPROT ID: P63165	Recommended Dilutions: IF/ICC 1:50-1:500
Isotype: IgG1	Full Name: SMT3 suppressor of mif two 3 homolog 1 (S. cerevisiae)	Excitation/Emission maxima wavelengths: 493 nm / 522 nm
Immunogen Catalog Number: AG29402	Calculated MW: 12 kDa	
	Observed MW: 15-100 kDa	

Applications

Tested Applications: IF/ICC	Positive Controls: IF/ICC : MCF-7 cells,
Species Specificity: human, mouse, rat	

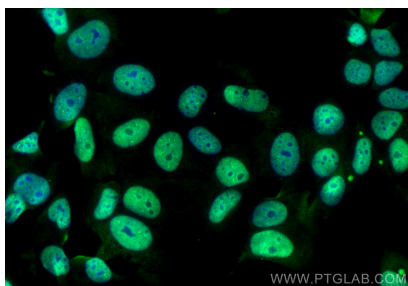
Background Information

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 SUMO4 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

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

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.