

# SUMO1 Recombinant monoclonal antibody

Catalog Number: 87942-1-RR

## Basic Information

**Catalog Number:**

87942-1-RR

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG0414

**GenBank Accession Number:**

BC006462

**GeneID (NCBI):**

7341

**UNIPROT ID:**

P63165

**Full Name:**SMT3 suppressor of mif two 3  
homolog 1 (S. cerevisiae)**Calculated MW:**

12 kDa

**Observed MW:**

12~18 kDa, 80-90 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

253578A9

**Recommended Dilutions:**

WB: 1:5000-1:50000

## Applications

**Tested Applications:**

WB, ELISA

**Species Specificity:**

human, mouse, rat

**Positive Controls:**WB : HeLa cells, HepG2 cells, A549 cells, Jurkat cells,  
U2OS cells, NIH/3T3 cells, PC-12 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 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:**

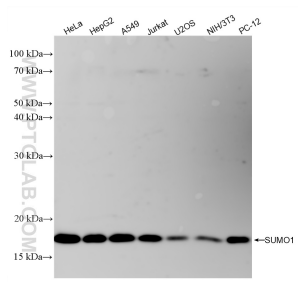
Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 87942-1-RR (SUMO1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.