

# SUMO-2 (G93) polyclonal antibody

Catalog: BCP01585 Host: Rabbit Reactivity: Human, Mouse, Rat

#### **BackGround:**

The small ubiquitin-related modifier (SUMO) proteins, which include SUMO-1, SUMO-2 and SUMO-3, belong to the ubiquitin-like protein family. Like ubiquitin, the SUMO proteins are synthesized as precursor proteins that undergo processing before conjugation to target proteins. Also, both utilize the E1, E2, and E3 cascade enzymes for conjugation. However, SUMO and ubiquitin differ with respect to targeting. Ubiquitination predominantly targets proteins for degradation, whereas sumoylation targets proteins to a variety of cellular processing, including nuclear transport, transcriptional regulation, apoptosis and protein stability. The unconjugated SUMO-1, SUMO-2 and SUMO-3 proteins localize to the nuclear membrane, nuclear bodies and cytoplasm, respectively. SUMO-1 utilizes Ubc9 for conjugation to several target proteins, which include IkBa, MDM2, p53, PML and Ran GAP1. SUMO-2 and SUMO-3 contribute to a greater percentage of protein modification than does SUMO-1, and unlike SUMO-1, they can form polymeric chains. In addition, SUMO-3 regulates b-Amyloid generation and may be critical in the onset or progression of Alzheimer's disease.

## **Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

#### **Molecular Weight:**

~ 11 kDa

#### **Swiss-Prot:**

P61956

#### **Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

### **Applications:**

WB: 1:500~1:1000 IHC: 1:50~1:200 IP: 1:50~1:200

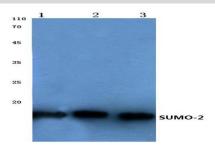
# **Storage&Stability:**

Store at  $4 \,^{\circ}$ C short term. Aliquot and store at  $-20 \,^{\circ}$ C long term. Avoid freeze-thaw cycles.

## **Specificity:**

SUMO-2 (G93) polyclonal antibody detects endogenous levels of SUMO-2 protein.

#### **DATA:**



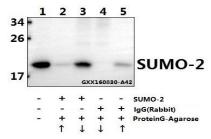
Western blot (WB) analysis of SUMO-2 (G93) polyclonal antibody at 1:500 dilution

Lane1:Hela whole cell lysate(40ug)

Lane2:HEK293T whole cell lysate(40ug)

Lane3:PC12 whole cell lysate(40ug)

Lane4:CT-26 whole cell lysate(40ug)



Immunoprecipitation of PC12 cell lysates using SUMO-2 (G93) pAb (Sepharose Bead Conjugate) #BD0048(lane 2 and lane 3) and Nonspecific IgG Control (Sepharose Bead Conjugate)#BD0048 (lane 4 and lane 5) .Lane 1 is 30% input. The western blot was probed using SU-MO-2 (G93) pAb. "↑" (supernatant); "↓" (deposition)

#### Note:

For research use only, not for use in diagnostic procedure.