

## Anti-SUMO1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

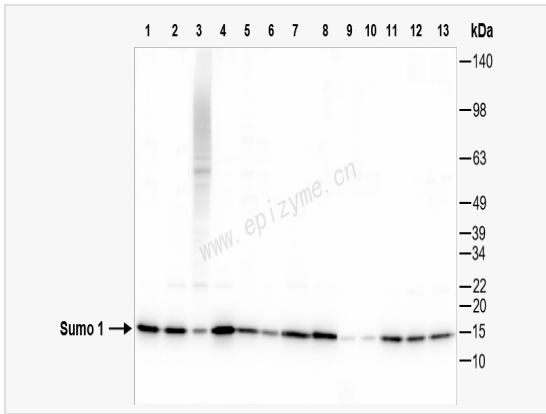
Catalog # R015186

### Product Information

|             |   |
|-------------|---|
| Application | WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA   |
| Reactivity  | Human, Mouse, Rat   |
| Dilution    | WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200   |
| Host        | Rabbit  |
| Clonality   | Monoclonal  |
| Clone No.   | 41N34F85  |
| Isotype     | IgG   |
| Label       | Unconjugated  |
| Immunogen   | A synthesized peptide derived from human Sumo 1   |
| Format      | Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.                     |
| Storage     | Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage. |
| Precautions | Anti-SUMO1 Rabbit mAb [41N34F85] is for research use only and not for use in diagnostic or therapeutic procedures.          |

### Protein Information

|                   |  |
|-------------------|--|
| Synonyms          | GAP modifying protein 1; GAP-modifying protein 1; GMP 1; GMP1; OFC10; PIC 1; PIC1; SENP2; Sentrin 1; Sentrin; Small ubiquitin related modifier 1; Small ubiquitin-like modifier 1; Small ubiquitin-related modifier 1; SMT3; SMT3 homolog 3; SMT3 suppressor of mif two 3 homolog 1; SMT3, yeast, homolog 3; Smt3C; SMT3H3; SUMO-1; SUMO1; SUMO1_HUMAN; Ubiquitin homology domain protein PIC1; Ubiquitin Like 1; Ubiquitin like protein SMT3C; Ubiquitin like protein UBL1; Ubiquitin-homology domain protein PIC1; Ubiquitin-like protein SMT3C; Ubiquitin-like protein UBL1; UBL 1; UBL1.   |
| Calculated MW     | Calculated MW: 12 kDa; Observed MW: 12 kDa   |
| Uniprot ID        | P63165   |
| Gene ID           | 7341   |
| Background        | This gene encodes a protein that is a member of the SUMO (small ubiquitin-like modifier) protein family. It functions in a manner similar to ubiquitin in that it is bound to target proteins as part of a post-translational modification system. However, unlike ubiquitin which targets proteins for degradation, this protein is involved in a variety of cellular processes, such as nuclear transport, transcriptional regulation, apoptosis, and protein stability. It is not active until the last four amino acids of the carboxy-terminus have been cleaved off. Several pseudogenes have been reported for this gene. Alternate transcriptional splice variants encoding different isoforms have been characterized. [provided by RefSeq, Jul 2008] |
| Cellular Location | Nucleus membrane. Nucleus speckle. Cytoplasm. Recruited by BCL11A into the nuclear body.   |



Western Blot - Anti-SUMO1 Rabbit mAb [41N34F85]

All lanes: R015186 at 1:1,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 4: SW620 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 5: Caco2 (Human colorectal adenocarcinoma epithelial cell) whole cell lysates

Lane 6: Jurkat (Human T lymphocytic leukemia cell) whole cell lysates

Lane 7: 293T (Human embryonic kidney cell) whole cell lysates

Lane 8: SCC-9 (Human tongue squamous carcinoma epithelial cell) whole cell lysates

Lane 9: Mouse heart whole tissue lysates

Lane 10: Mouse brain whole tissue lysates

Lane 11: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates

Lane 12: Raw264.7 (Mouse mononuclear macrophage leukemia cell) whole cell lysates

Lane 13: PC-12 (Rat adrenal pheochromocytoma epithelial cell) whole cell lysates

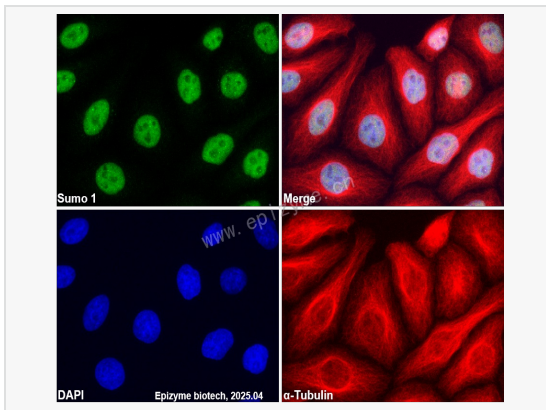
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 12 kDa

Observed band size: 12 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-SUMO1 Rabbit mAb [41N34F85]

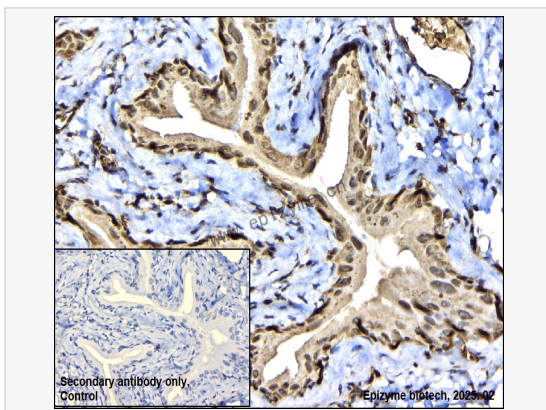
Sample: HeLa cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibodies: R015186 at 1:100 dilution and  $\alpha$ -tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution

Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).



Immunohistochemistry - Anti-SUMO1 Rabbit mAb [41N34F85]

Sample: Paraformaldehyde-fixed, paraffin embedded rat bladder tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

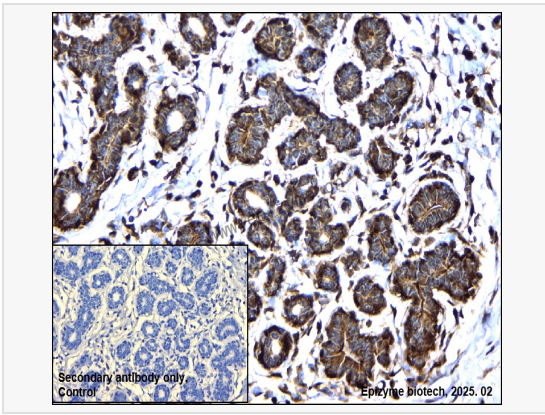
Primary antibody: R015186 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



**Immunohistochemistry - Anti-SUMO1 Rabbit mAb [41N34F85]**

Sample: Paraformaldehyde-fixed, paraffin embedded human breast cancer tissue  
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

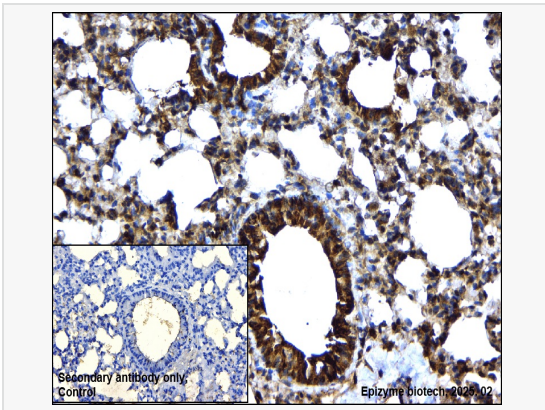
Primary antibody: R015186 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution  
DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



**Immunohistochemistry - Anti-SUMO1 Rabbit mAb [41N34F85]**

Sample: Paraformaldehyde-fixed, paraffin embedded mouse lung tissue  
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R015186 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution  
DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.