

Product Name: KD-Validated SUMO1 Mouse Monoclonal Antibody**Catalog #: KVA00602**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 11.6kDa

Antigen Information

Gene Name	SUMO1
Alternative Names	SUMO1; Small Ubiquitin Like Modifier 1; SMT3H3; SMT3C; GMP1; SUMO-1; OFC10; PIC1; UBL1; Ubiquitin-Homology Domain Protein PIC1; Small Ubiquitin-Related Modifier 1; Ubiquitin-Like Protein SMT3C; Ubiquitin-Like Protein UBL1; SMT3 Homolog 3; Sentrin; SMT3 Suppressor Of Mif Two 3 Homolog 1 (S. Cerevisiae); SMT3 Suppressor Of Mif Two 3 Homolog 1 (Yeast); SMT3 Suppressor Of Mif Two 3 Homolog 1; Ubiquitin-Like 1 (Sentrin); GAP Modifying Protein 1; GAP-Modifying Protein 1; SENP2; Smt3C; DAP1; SMT3
Gene ID	7341.0
SwissProt ID	P63165
Immunogen	Recombinant protein of human SUMO1

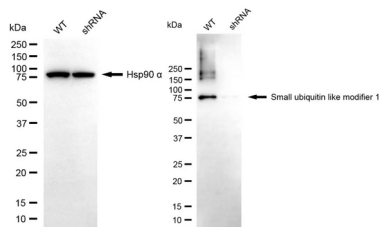
Background

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]

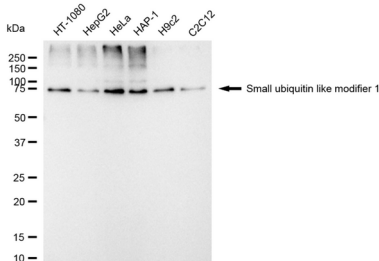
Research Area

Cell Biology, Cardiovascular, Metabolism, Cancer

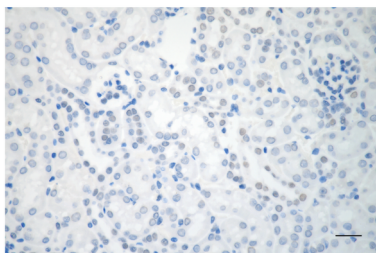
Image Data



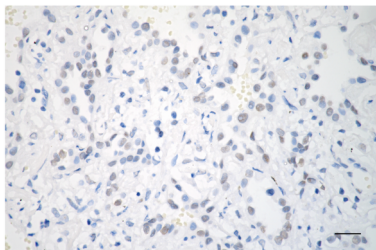
Western blotting analysis using small ubiquitin like modifier 1 antibody (KVA00602). Small ubiquitin like modifier 1 expression in wild-type (WT) and small ubiquitin like modifier 1 (SUMO1) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with small ubiquitin like modifier 1 antibody (KVA00602, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



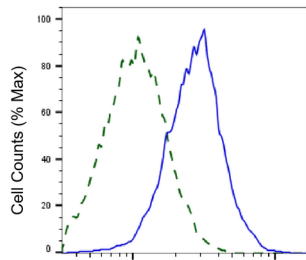
Western blotting analysis using small ubiquitin like modifier 1 antibody (KVA00602). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with small ubiquitin like modifier 1 antibody (KVA00602, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Immunohistochemistry was performed on paraffin-embedded mouse kidney using small ubiquitin like modifier 1 antibody (KVA00602, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.

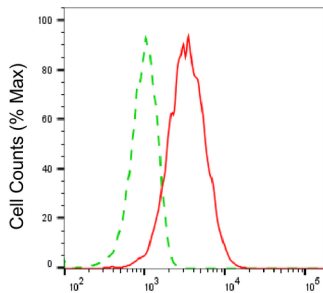


Immunohistochemistry was performed on paraffin-embedded human lung adenocarcinoma using small ubiquitin like modifier 1 antibody (KVA00602, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Small ubiquitin like modifier 1-Alexa Fluor® 647

Validation of Small ubiquitin like modifier 1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Small ubiquitin like modifier 1 antibody (KVA00602, 1:2,000) and analyzed using BD flow cytometer.



Small ubiquitin like modifier 1-Alexa Fluor® 647

Flow cytometric analysis of Small ubiquitin like modifier 1 expression in HAP-1 cells using Small ubiquitin like modifier 1 antibody (KVA00602, 1:2,000). Green, isotype control; red, Small ubiquitin like modifier 1.