



Sumo 1 Rabbit mAb

Catalog No	YP-rAb-17826
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,ELISA
Gene Name	SUMO1
Protein Name	Small ubiquitin-related modifier 1
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:2000-1:10000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	SUMO1 ; SMT3C ; SMT3H3 ; UBL1 ; OK/SW-cl.43 ; Small ubiquitin-related modifier 1 ; SUMO-1 ; GAP-modifying protein 1 ; GMP1 ; SMT3 homolog 3 ; Sentrin ; Ubiquitin-homology domain protein PIC1 ; Ubiquitin-like protein SMT3C ; Smt3C ; Ubiquitin-like protein
Observed Band	80kD
Calculated Molecular Weight	12kD
Cell Pathway	Cytoplasm, Nucleus
Tissue Specificity	Brain,Colon adenocarcinoma,Epithelium,Placenta,
Function	Caution:The sequence shown here is derived from an Ensembl automatic analysis pipeline and should be considered as preliminary data.,Function:Ubiquitin-like protein which can be covalently attached to target lysines as a monomer. Does not seem to be involved in protein degradation and may function as an antagonist of ubiquitin in the degradation process. Plays a role in a number of cellular processes such as nuclear transport, DNA replication and repair, mitosis and signal transduction. Involved in targeting RANGAP1 to the nuclear pore complex protein RANBP2. Covalent attachment to its substrates





requires prior activation by the E1 complex SAE1-SAE2 and linkage to the E2 enzyme UBE2I, and can be promoted by an E3 ligase such as PIAS1-4, RANBP2 or CBX4.,online information:SUMO protein entry,PTM: Cleavage of precursor form by SENP1 or SENP2 is necessary for function.,similarity: Belongs to the ubiquitin family. SUMO subfamily.,similarity: Contains 1 ubiquitin-like domain.,subunit: Interacts with SAE2, UBE2I, RANBP2, PIAS1 and PIAS2. Interacts with PARK2. Covalently attached to a number of proteins such as PML, RANGAP1, HIPK2, SP100, p53, p73-alpha, MDM2, JUN, DNMT3B and TDG. Also interacts with HIF1A, HIPK2, HIPK3, CHD3, EXOSC9, RAD51 and RAD52.,

Background

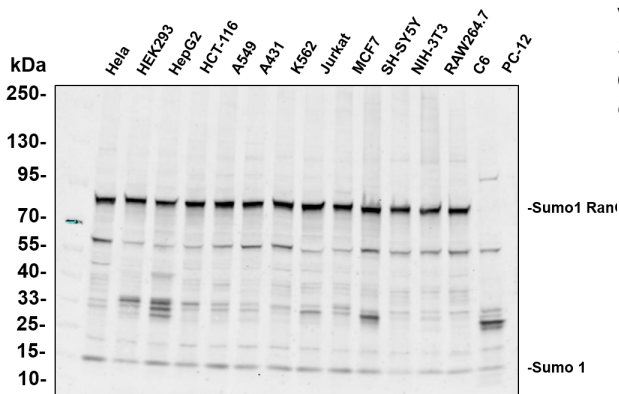
This gene encodes a protein that is a member of the SUMO (small ubiquitin-like modifier) protein family. It functions in a manner similar to ubiquitin in that it is bound to target proteins as part of a post-translational modification system. However, unlike ubiquitin which targets proteins for degradation, 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],

matters needing attention

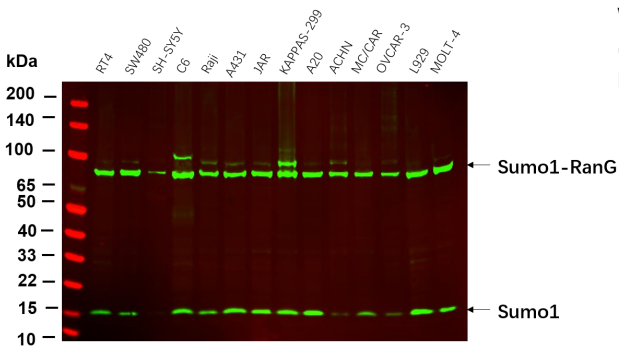
Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

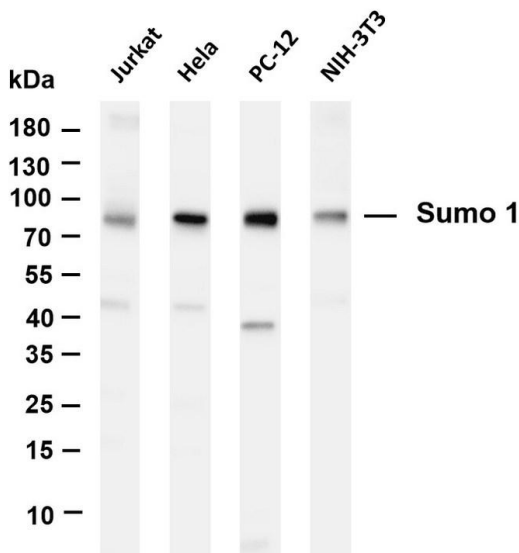


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4°C, over night with a 1:5000 dilution. The Dylight 800-conjugated Goat anti-Rabbit antibody

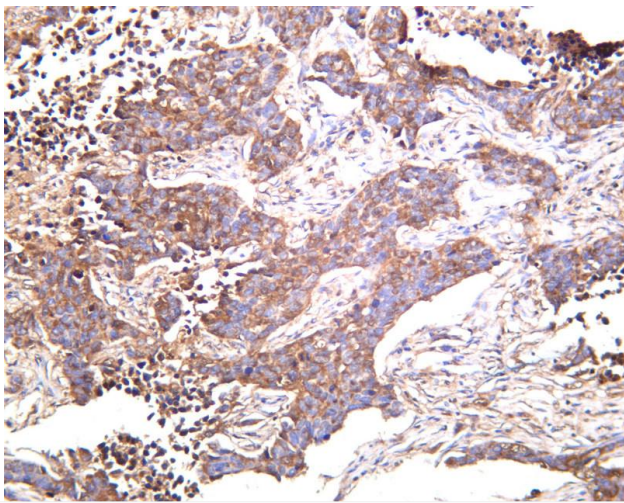


Western blot analysis of lysates from various cell, (Green) primary antibody was diluted at 1:5000, 4° over night, Dylight 800 secondary antibody was diluted at 1:10000, 37° 1hour.

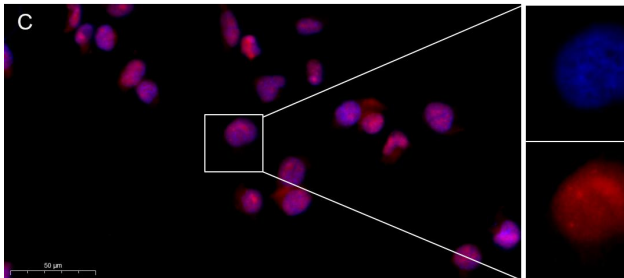




Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Sumo 1 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Jurkat Lane 2: HeLa Lane 3: PC-12 Lane 4: NIH-3T3 Predicted band size: 12kDa Observed band size: 80kDa



Human lung carcinoma was stained with anti-Sumo 1 rabbit antibody



Immunofluorescence analysis of HeLa. Picture A: Sumo 1 Rabbit mAb (red). Picture B: DAPI (blue). Picture C: Merge of A+B

