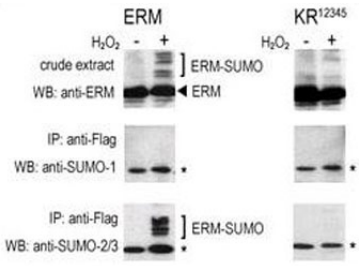
SUMO Antibody (F42008)

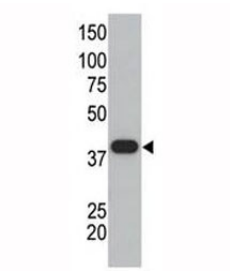
Catalog No.	Formulation	Size
F42008-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F42008-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

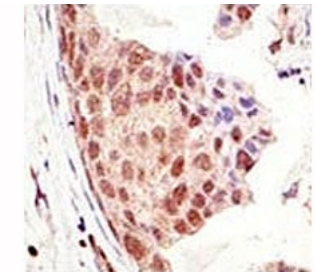
Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Rat, Bovine, Pig
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	P63165
Applications	Western Blot : 1:1000 IHC (Paraffin) : 1:50-1:100 Flow Cytometry : 1:10-1:50
Limitations	This SUMO antibody is available for research use only.



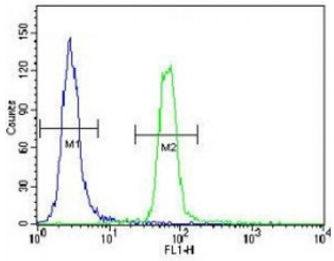
COS-7 cells were transfected for 24 hrs with a plasmid expressing FLAG-ERM (left panels) or FLAG-ERM KR12345 (right panels). Top: lysate tested with ERM Ab. Center: IP with FLAG Ab followed by WB with NSJ# F42008 SUMO antibody. Bottom: IP with FLAG Ab followed by WB with NSJ# F42027 SUMO-2/3 antibody. (*) represents immunoprecipitated ERM-like forms detected by SUMO Abs.



SUMO polyclonal antibody used in western blot to detect GST-SUMO1 fusion protein. Predicted molecular weight: 12-15 kDa + 25 kDa GST tag.



IHC analysis of FFPE human breast carcinoma tissue stained with the SUMO antibody



SUMO antibody flow cytometric analysis of HeLa cells (green) compared to a negative control (blue). FITC-conjugated goat-anti-rabbit secondary Ab was used for the analysis.

Description

Ubiquitin-like protein that can be covalently attached to proteins as a monomer or a lysine-linked polymer. Covalent attachment via an isopeptide bond to its substrates requires prior activation by the E1 complex SAE1-SAE2 and linkage to the E2 enzyme UBE2I, and can be promoted by E3 ligases such as PIAS1-4, RANBP2 or CBX4. This post-translational modification on lysine residues of proteins plays a crucial role in a number of cellular processes such as nuclear transport, DNA replication and repair, mitosis and signal transduction. Involved for instance in targeting RANGAP1 to the nuclear pore complex protein RANBP2. Covalently attached to the voltage-gated potassium channel KCNB1; this modulates the gating characteristics of KCNB1. Polymeric SUMO1 chains are also susceptible to polyubiquitination which functions as a signal for proteasomal degradation of modified proteins. May also regulate a network of genes involved in palate development. [UniProt]

Application Notes

Titration of the SUMO antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 55-86 from human SUMO1 was used as the immunogen for this SUMO antibody.

Storage

Aliquot the SUMO antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.