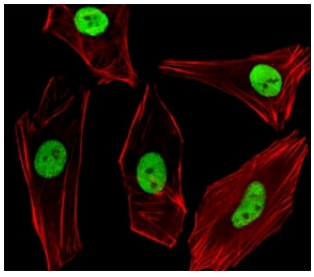
SUMO2/3 Antibody (F42027)

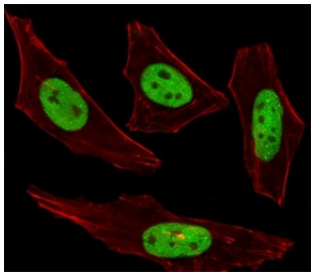
Catalog No.	Formulation	Size
F42027-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F42027-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

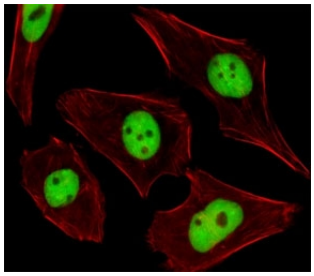
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Predicted Reactivity	Bovine, Chicken, Hamster, Pig, Primate, Rat, Xenopus, Zebrafish
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	P55854
Applications	Immunofluorescence : 1:25-100 Western Blot : 1:1000 IHC (FFPE) : 1:50-100
Limitations	This SUMO2/3 antibody is available for research use only.



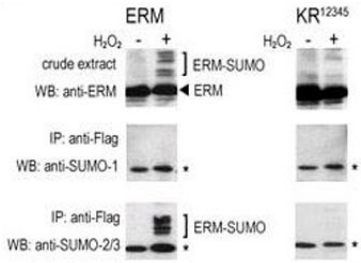
Fluorescent image of SH-SY5Y cells stained with SUMO2/3 antibody diluted at 1:100 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit lgG was used as the secondary Ab (green). Cytoplasmic actin was counterstained with Alexa Fluor 555 conjugated with Phalloidin (red).



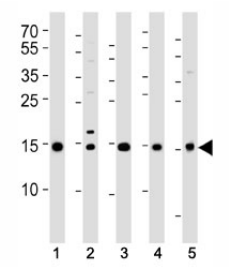
Fluorescent image of HeLa cells stained with SUMO2/3 antibody was diluted at 1:100 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit lgG was used as the secondary Ab (green). Cytoplasmic actin was counterstained with Alexa Fluor 555 conjugated with Phalloidin (red).



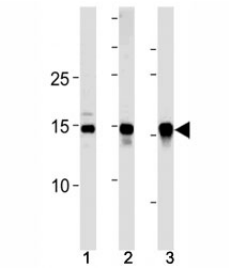
Fluorescent image of U251 cells stained with SUMO2/3 antibody. Ab was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit lgG was used as the secondary (green). Cytoplasmic actin was counterstained with Alexa Fluor 555 conjugated with Phalloidin (red).



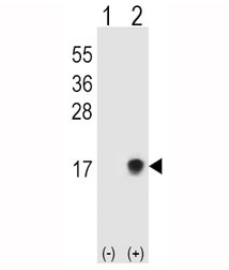
COS-7 cells were transfected for 24 hrs with a plasmid expressing FLAG-ERM (left panels) or FLAG-ERM KR12345 (right panels). Top: lysate tested with ERM Ab. Center: IP with FLAG Ab followed by WB with NSJ# F42008 SUMO antibody. Bottom: IP with FLAG Ab followed by WB with NSJ# F42027 SUMO2/3 antibody. (*) represents immunoprecipitated ERM-like forms detected by SUMO Abs.



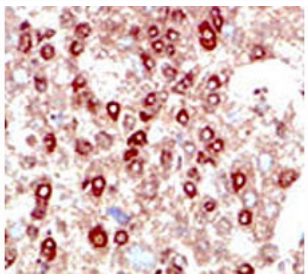
Western blot analysis of lysate from (1) 293T, (2) HeLa, (3) HL-60, (4) Jurkat cell lines and (5) rat liver tissue using SUMO2/3 antibody at 1:1000.



SUMO2/3 antibody western blot analysis in (10 U251 cells, (2) mouse liver and (3) rat liver lysate.



Western blot testing of SUMO2/3 antibody and 293T cell lysate either nontransfected (Lane 1) or transiently transfected (Lane 2) with the SUMO3 gene.



IHC testing of human hepatocarcinoma stained with SUMO2/3 antibody.

Description

SUMO2 and SUMO3 are members of the SUMO (small ubiquitin-like modifier) protein family. This protein family 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. In vertebrates, three members of the SUMO family have been described, SUMO 1 and the functionally distinct homologues SUMO 2 and SUMO 3. SUMO modification sites present in the N terminal regions of SUMO 2 and SUMO 3 are utilized by SAE1/SAE2 (SUMO E1) and Ubc9 (SUMO E2) to form polymeric chains of SUMO 2 and SUMO 3 on protein substrates, a property not shared by SUMO 1.

Application Notes

Titration of the SUMO2/3 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 49-81 from human SUMO3 was used as the immunogen for this SUMO2/3 antibody.

Storage

Aliquot the SUMO2/3 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.