

Product datasheet for **AP11270PU-N**

SUMO4 (V55 Mutant) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	ELISA: 1/1,000. Western blot: 1/100-1/500. Immunohistochemistry on paraffin sections: 1/50-1/100.
Reactivity:	Human
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	This antibody is generated from rabbits immunized with a KLH conjugated peptide CEPRGLS(V)KQIRFRFG selected from human SUMO4. This antibody is affinity purified using peptides CEPRGLS(V)KQIRFRFG (positive selection) and CEPRGLS(M)KQIRFRFG (negative selection).
Specificity:	This antibody is specific to SUMO4 (V55 Mutant).
Formulation:	PBS containing 0.09% (W/V) Sodium Azide as preservative State: Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	small ubiquitin-like modifier 4
Database Link:	Entrez Gene 387082 Human Q6EEV6



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Background:

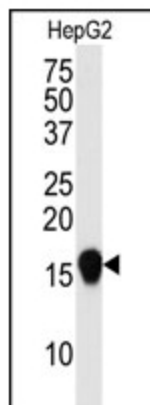
SUMO4 is a member of the SUMO gene family. This family of small ubiquitin-related modifiers covalently modify target lysines in proteins and control the target proteins' subcellular localization, stability, or activity. Upon oxidative stress, SUMO4 conjugates to various anti-oxidant enzymes, chaperones, and stress defense proteins. This protein may also conjugate to NFKBIA, TFAP2A and FOS, negatively regulating their transcriptional activity, and to NR3C1, positively regulating its transcriptional activity. Covalent attachment to SUMO4 substrates requires prior activation by the E1 complex SAE1-SAE2 and linkage to the E2 enzyme UBE2I. In contrast to SUMO1, SUMO2 and SUMO3, SUMO4 seems to be insensitive to sentrin-specific proteases due to the presence of Pro-90. This may impair processing to mature form and conjugation to substrates. SUMO4 is located in the cytoplasm and specifically modifies IKBA, leading to negative regulation of NF-kappa-B-dependent transcription of the IL12B gene. The M55V substitution has been associated with type I diabetes.

Synonyms:

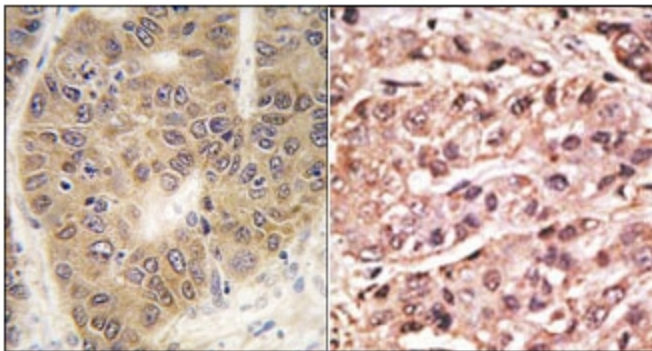
SUMO-4

Note:

Predicted MW: 10653 Da

Product images:

Western blot analysis of SUMO4 Antibody (V55 Mutant) in HepG2 cell line lysate (35ug/lane). SUMO4 mutant (arrow) was detected using the purified Pab (1:80 dilution).



(LEFT) Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with SUMO4 antibody (V55 Mutant), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. (RIGHT) Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.