

DESCRIPTION

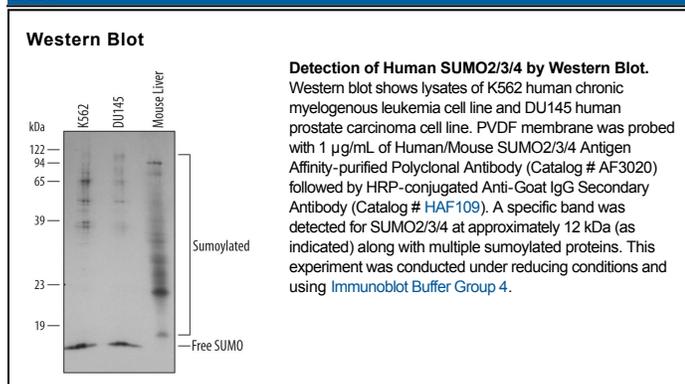
Species Reactivity	Human/Mouse
Specificity	Detects endogenous human and mouse proteins modified with SUMO2, 3, or 4 in Western blots. Because of the high level of sequence homology, this antibody has equivalent reactivity to SUMO2, SUMO3, and SUMO4 based in Western blots with recombinant SUMO protein. Cross-reactivity to recombinant human SUMO1 was minimal in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human SUMO2 Ala2-Tyr95 Accession # P61956
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Small Ubiquitin-like Modifiers (SUMOs) are a family of small, related proteins that can be enzymatically attached to a target protein by a post-translational modification process termed sumoylation. Unlike ubiquitination, which targets proteins for degradation, sumoylation participates in a number of cellular processes, such as nuclear transport, transcriptional regulation, apoptosis, and protein stability. All SUMO proteins share the conserved ubiquitin domain and the C-terminal diglycine cleavage/attachment site. Human SUMO2, also known as Sentrin2 and SMT3B is synthesized as a 95 amino acid (aa), 11 kDa propeptide that contains a two aa C-terminal prosegment, and an 18 aa N-terminal protein interacting region (aa 33-50). Following prosegment cleavage, the C-terminal glycine is enzymatically attached to a lysine on a target protein. Human SUMO2 shares 100% sequence identity to SUMO-2 from mouse. SUMO2 also has very high sequence homology to SUMO3 and SUMO4, 86 % and 85%, respectively. SUMO2 shares only 44% sequence identity to SUMO1.