

**DESCRIPTION**

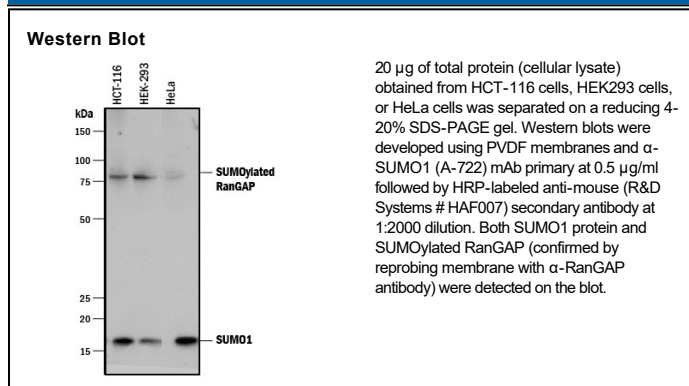
<b>Species Reactivity</b>	Human
<b>Specificity</b>	This antibody detects endogenous, human SUMOylated proteins in Western blots. Cross-reactive against murine and rat proteins.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 21C7
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Purified, recombinant human SUMO1 Accession # P63165
<b>Formulation</b>	Supplied as a solution in PBS containing Glycerol and Sodium Azide. See Certificate of Analysis for details.

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1-0.5 µg/mL	See Below
<b>Immunoprecipitation</b>	Recommended IP conditions: use 10-20 µg of A-722 to recover SUMOylated proteins from 0.5 – 1 mg of total protein in 1 ml of cellular lysate. Use of Sentrin Protease inhibitors such as SUMO1- Vinyl Sulfone may increase yields of recovered SUMOylated substrates.	

**DATA**



**PREPARATION AND STORAGE**

<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<ul style="list-style-type: none"> <li>● 6 months from date of receipt, -20 °C as supplied.</li> <li>● 3 months, -20 °C under sterile conditions after opening.</li> </ul>

**BACKGROUND**

Small Ubiquitinlike Modifiers (SUMOs) are a family of small, related proteins that can be enzymatically attached to a target protein by a posttranslational 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 human SUMO proteins share a conserved ubiquitin-like domain and a C-terminal diglycine cleavage/attachment site. Human SUMO1, also known as Sentrin, UBL1, and SMT3C, is synthesized as a 101 amino acid (aa) propeptide that contains a four aa Cterminal prosegment. Following prosegment cleavage, the Cterminal glycine may be enzymatically attached to a lysine on a target protein. Human SUMO1 shares 100% sequence identity to SUMO1 from mouse. SUMO1 is the most unique of the four identified SUMO proteins and shares only 44%, 47%, and 41% sequence identity to SUMO2, SUMO3, and SUMO4, respectively.

**PRODUCT SPECIFIC NOTICES**

\* Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to SDS for additional information and handling instructions.