



## Product Datasheet

<b>Product Name</b>	Small Ubiquitin-Related Modifier 2 Human Recombinant
<b>Cata No</b>	CB501197
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	SUMO-2, Ubiquitin-like protein SMT3B, SMT3 homolog 2, Sentrin-2 HSMT3, SUMO-3, Sentrin2, SUMO2, SMT3H2, MGC117191.

### Description

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. SUMO2 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain

containing 95 amino acids and having a molecular mass of 11 kDa.

The SUMO-2 is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

### Purity

Greater than 95.0% as determined by:  
(a) Analysis by RP-HPLC.  
(b) Analysis by SDS-PAGE.

### Formulation

The SUMO2 was lyophilized from 1X PBS, pH 7.4.

### Stability

Lyophilized SUMO2 although stable 10°C for 1 week, should be stored desiccated below -18°C.

**Please prevent freeze-thaw cycles.**

### Sequence

MADEKPKEGVKTENNDHINLKVAGQDGSVVQFKI  
KRHTPLSKLMKAYC  
ERQGLSMRQIRFRFDGQPINETDTPAQLEMEDED  
TIDVFQQQTGGVY