



Recombinant *S. cerevisiae* SUMO E1 (SAE1/UBA2) (DAG2656)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	<i>S. cerevisiae</i> SUMO E1 (SAE1/UBA2)
Nature	Recombinant
Expression System	<i>E. coli</i>
Species	<i>S. cerevisiae</i>
Purity	> 90% by SDS-PAGE
Conjugate	Unconjugated
Procedure	None
Buffer	in 50 mM HEPES pH 8.0, 150 mM NaCl
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction	<p>Small Ubiquitin-like Modifier (or SUMO) proteins are a family of small proteins that are covalently attached to and detached from other proteins in cells to modify their function. SUMOylation is a post-translational modification involved in various cellular processes, such as nuclear-cytosolic transport, transcriptional regulation, apoptosis, protein stability, response to stress, and progression through the cell cycle. SUMO proteins are similar to ubiquitin, and SUMOylation is directed by an enzymatic cascade analogous to that involved in ubiquitination. In contrast to ubiquitin, SUMO is not used to tag proteins for degradation. Mature SUMO is</p>
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produced when the last four amino acids of the C-terminus have been cleaved off to allow formation of an isopeptide bond between the C-terminal glycine residue of SUMO and an acceptor lysine on the target protein. *Saccharomyces cerevisiae* is a species of yeast. It is perhaps the most useful yeast, having been instrumental to winemaking, baking and brewing since ancient times. It is believed that it was originally isolated from the skin of grapes (one can see the yeast as a component of the thin white film on the skins of some dark-colored fruits such as plums; it exists among the waxes of the cuticle). It is one of the most intensively studied eukaryotic model organisms in molecular and cell biology, much like *Escherichia coli* as the model bacterium. It is the microorganism behind the most common type of fermentation. *S. cerevisiae* cells are round to ovoid, 5–10 micrometres in diameter. It reproduces by a division process known as budding.

Keywords

S. cerevisiae SUMO protein; SUMO protein; Small Ubiquitin-like Modifier; SUMO; *Saccharomyces cerevisiae*; *S. cerevisiae*; *Saccharomyces*; *Saccharomycetaceae*; *Saccharomyces cerevisiae* Small Ubiquitin-like Modifier
