Lot # XXXXX

BostonBiochem

MATERIAL DATA SHEET

GST-SUMO1, *human recombinant*
Cat. # UL-710

The ubiquitin-like SUMO-1 is conjugated to a variety of proteins in the presence of UbcH9 and the SAE1/SAE2 (human) or Aos1/Uba2 (yeast) activating enzyme. SUMO-1 is derived from the precursor pro-SUMO-1 (Accession # NM_003352). Human SUMO-1 shares 46% and 47% identity with SUMO-2 and SUMO-3 respectively. SUMOylation can occur without the requirement of a specific E3 ligase activity, where SUMO is transferred directly from UbcH9 to specific substrates. SUMOylated substrates are primarily localized to the nucleus (RanGAP-1, RANBP2, PML, p53, Sp100, HIPK2) but there are also cytosolic substrates (IκBα, GLUT1, GLUT4). SUMO modification has been implicated in functions such as nuclear transport, chromosome segregation and transcriptional regulation.

Product Information

Quantity:	500 µg
Stock:	X mg/ml (X µM) in 50 mM HEPES pH 8.0, 150 mM NaCl, 1mM DTT. Actual protein concentration will vary with specific Lot #.
MW:	38.6 kDa
Purity:	> 95% by SDS-PAGE

Use & Storage

Use:	Typical *in vitro* concentration for conjugate formation is 10-50 µM depending on conditions.
Storage:	Store at - 80°C. Avoid multiple freeze/thaw cycles.

Literature

References:

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