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# Recombinant Human SUMO2 Protein (His Tag)

Catalog Number: PKSH033067

Note: Centrifuge before opening to ensure complete recovery of vial contents.

#### **Description**

Species Human

Source E.coli-derived Human SUMO2 protein Met 1-Gly93, with an N-terminal His

 Mol\_Mass
 13.0 kDa

 Accession
 AAH08450.1

**Bio-activity** Not validated for activity

# **Properties**

**Purity** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin**  $< 1.0 \text{ EU per } \mu\text{g}$  of the protein as determined by the LAL method.

**Storage** Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80

°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

**Shipping** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation** Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

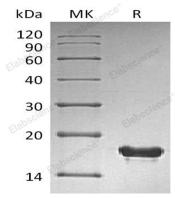
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

before lyophilization.

Please refer to the specific buffer information in the printed manual.

**Reconstitution** Please refer to the printed manual for detailed information.

#### Data



> 95 % as determined by reducing SDS-PAGE.

## Background

Small Ubiquitin-Related Modifier 2 (SUMO2) is an Ubiquitin-like protein that belongs to the ubiquitin family with SUMO subfamily. It is a family of small, related proteins that can be enzymatically attached to a target protein by a post-translational modification process termed sumoylation. SUMO2 can be covalently attached to proteins as a monomer or as a lysine-linked polymer. Covalent attachment via an isopeptidebond to its substrates requires prior activation by the E1 complex SAE1-SAE2 and linkage to the E2 enzyme UBE2I, and can be promoted by an E3 ligase such as PIAS1-4, RANBP2 or CBX4. This post-translational modification on lysine residues of proteins plays a crucial role in a number of cellular processes such as nuclear transport, DNA replication and repair, mitosis and signal transduction. Polymeric SUMO2 chains are also susceptible to polyubiquitination which functions as a signal for proteasomal degradation of modified proteins.

## For Research Use Only

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