

Product Name: SPOP

Alternate Names: HIB homolog 1; Roadkill homolog 1

Product Code: TE3-111

FOR RESEARCH USE ONLY (RUO)

Verified Applications / Usage

Suitable for studies of SPOP-mediated substrate recognition, CUL3 E3 ubiquitin ligase complex assembly, and ubiquitin-dependent protein degradation pathways.

Physical Characteristics

Species: Human

Predicted MW (kDa): 50 kDa

Source: *E. coli* BL21

Purity: 90 %

Tag: N-His₆-SUMO

Formulation: 40 mM HEPES, 200 mM, NaCl, 10% Glycerol, 1 mM EDTA, 2 mM TCEP, pH 7.6

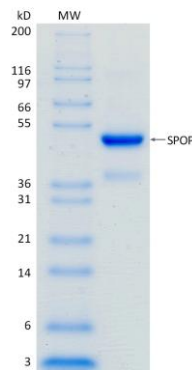
Shipping: The product is shipped with dry ice. Upon receipt, store it immediately at the temperature recommended below.

Stability/Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles. Store ≤ -70°C (stable for 24 months from date of receipt).

Quality Assurance

Purity & SDS-PAGE

Protein ID: Speckle-type POZ protein



2 µg SPOP run on 4-12% SDS-PAGE gel under reducing conditions, then visualized with Colloidal Coomassie Blue Stain.

Activity Assay

Verified in Ubiquitylation Assay with CUL3/RBX1 and BRD4-BD1+BD2.

Background

Description

Speckle-type POZ protein (SPOP) functions as a substrate adaptor for the CUL3-RBX1 E3 ubiquitin ligase complex, directing selective ubiquitylation of target proteins through its MATH substrate-recognition domain and BTB/POZ domain that mediates CUL3 interaction and complex assembly. This recombinant SPOP protein (aa 28-359) contains an N-His₆-SUMO tag and N- and C-terminal truncations engineered to improve solubility and stability while retaining the domains required for ligase function, making it suitable for *in vitro* ubiquitylation assays, substrate discovery, and studies of CUL3-dependent ligase mechanisms.

Accession Number: O43791

Entrez Gene ID: SPOP

Protein Sequence

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MHHHHHHGSMDSQEAKPSTEDLGDKKEGEYIKLKVIGQDSSEIHFKVKMTTHLKKLKESYCQR
QGVPMNSLRFLFEGQRIADNHTPKELGMEEEDVIEVYQEQTGGKVVKFSYMWTINNFSFCREE
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GEETKAMESQRAYRFVQKDWGFKKFIRRDFFLLDEANGLLPDDKLTFLCEVSVVQDSVNISGQ
NTMNMVKVPECRLADELGGLWENSFRFTDCCLCVAGQEFQAHKAILAARSPVFSAMFEHEMEEES
KKNRVEINDVEPEVFKEMMCFIYTGKAPNLDKMADDLLAAADKYALERLKVMCEDALCSNLSV
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