

Skp1/His₆-Skp2

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Skp1/His₆-Skp2

SKP1 (S-phase kinase-associated protein 1) is an essential component of SCF (SKP1-CUL1-F-box protein) E3 Ubiquitin ligases that mediate the ubiquitination of proteins involved in cell cycle progression, signal transduction and transcription. SKP1 is the adapter protein that links Cullin-1 to various F-box proteins (such as SKP2) that serve as the substrate recognition components of SCF ligases. SKP2 targets include proteins involved in cell cycle progression and signal transduction. SKP2 recognizes phosphorylated CDKN1B/p27Kip and is involved in G1-S cell cycle transition in a CKS1-dependent manner. The Skp1/Skp2 complex is associated with Cullin-1 (CUL1) a core component of multiple SCF (SKP1-CUL1-F-box) E3 Ubiquitin ligase complexes mediating the ubiquitination of proteins. This complex consists of an N-terminal 6x-His tagged Skp2 and an untagged Skp1. The complex has been expressed and purified from insect cells Sf9.

Product Information

Quantity: 25 µg

Molecular Weight: Skp1 (18.6 kDa), Skp2 (48 kDa)

Concentration: 65 µM, 4.3 mg/mL

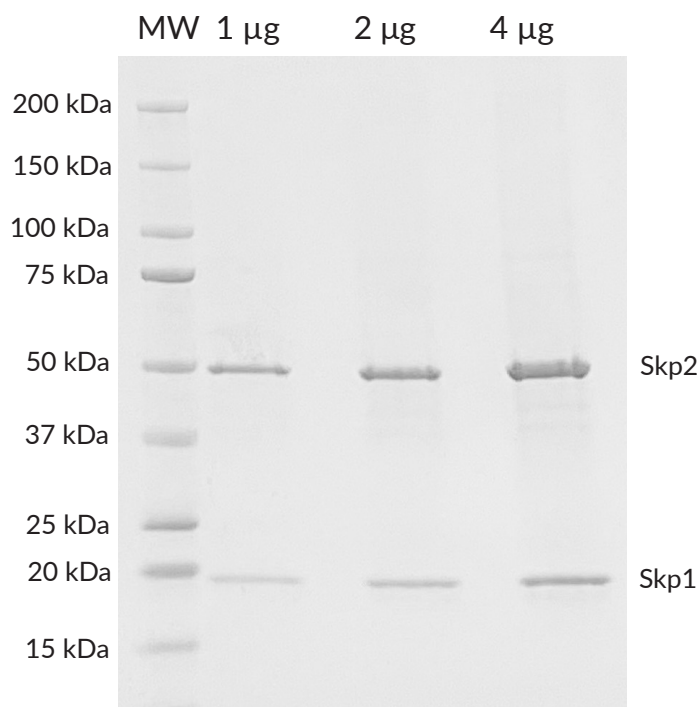
Purity: >95% by SDS-PAGE

Storage Buffer: 50 mM HEPES pH 7.5, 150 mM NaCl, 1 mM TCEP

Storage: -80C, Avoid multiple freeze / thaw

Usage: Working concentrations for this enzyme complex range from 20 - 50 nM for TR-FRET based ubiquitination assays in 384 plates.

Quality Control and Performance Data



Skp1/His₆-Skp2 SDS-PAGE. 1, 2, and 4 µg of Skp1/His-Skp2 were loaded onto a 4-20% SDS-PAGE gel, stained with Coomassie brilliant blue. Purity is >95%.

References

- 1) Donato Tedesco,¹ Jiri Lukas,² and Steven I. Reed, "The pRb-related protein p130 is regulated by phosphorylation-dependent proteolysis via the protein-ubiquitin ligase SCF^{Skp2}", *Genes Dev.* 2002 Nov 15;16(22):2946-57. doi: 10.1101/gad.1011202
- 2) Wei Wang, Lucas Nacusi, Robert J. Sheaff, and Xuedong Liu, "Ubiquitination of p21Cip1/WAF1 by SCF^{Skp2}: Substrate Requirement and Ubiquitination Site Selection" (2005) *Biochemistry* doi.org/10.1021/bi051071j
- 3) Goldenberg SJ, Cascio TC, Shumway SD, Garbutt KC, Liu J, Xiong Y, Zheng N. "Structure of the Cnd1-Cul1-Roc1 complex reveals regulatory mechanisms for the assembly of the multisubunit cullin-dependent ubiquitin ligases". *Cell.* 2004 Nov 12;119(4):517-28. doi: 10.1016/j.cell.2004.10.019. PMID: 15537541.

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