

MATERIAL DATA SHEET

Recombinant Human SKP1/FBX07/CUL1/RBX1 Complex

Cat. # E3-526

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 FBX07) that serve as the substrate recognition components of SCF ligases. FBX07 (aka FBX7 or PARK15) plays a role in mitophagy by helping target Parkin (PARK2) to depolarized mitochondria, thereby inducing the ubiquitination of TOMM20 and other mitochondrial proteins. Evidence from a *Drosophila* Parkin^{-/-} neurodegeneration model indicates that FBX07 can substitute for Parkin-mediated ubiquitination of mitochondrial substrates in some settings. This recombinant protein complex consists of His-tag SKP1, FLAG-tag FBX07, His-tag CUL1 and untagged RBX1.

Product Information

Quantity:	25 µg
MW:	21 kDa (SKP1), 63kDa (FBX07), 96 kDa (CUL1), 12 kDa (RBX1)
Source:	<i>Spodoptera frugiperda</i> , Sf21 (baculovirus)-derived human SKP1/FBX07/CUL1/RBX1 Complex protein Accession # P63208, Q9Y3I1, Q13616, P62877
Stock:	X mg/ml (X µM) in 50 mM HEPES pH 7.5, 200 mM NaCl, 10% (v/v) Glycerol, 1 mM DTT
Purity:	>85%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.

Use & Storage

Use:	Typical protein concentration for use in vitro will depend on experimental conditions. We recommend an initial starting concentration of 10-50 nM for in vitro ubiquitination reactions.
Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">• 60 months from date of receipt, -70 °C as supplied.• 3 months, -70 °C under sterile conditions after opening.

Literature

References:

1. Burchell V.S., et al. (2013) Nat. Neurosci. **16**: 1257
2. Chang Y.F. et al. (2006) Biochem. Biophys. Res. Comm. **342**: 1022
3. Hsu J.M., et al. (2004) J. Biol. Chem. **279**: 32592
4. Randle S.J. & Laman H. (2017) Curr. Protein Pept. Sci. **18**: 715
5. Stott S.R.W. et al. (2019) J. Pathol. **249**: 241

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