

Cul1/Skp1/Skp2/Rbx1 (M5I) Complex Recombinant

Catalog: 101755
Lot: 230725-1

Product Information

Description:	Recombinant human complex of Cul1 (cullin 1), Skp1 (S-phase kinase associated protein 1), Skp2 (S-phase kinase associated protein2) and Rbx1 (Rbx1 (ring-box 1). Recombinant Cul1, encompassing amino acids 2-776(end), contains an N-terminal FLAG-Tag. Recombinant Skp1, encompassing amino acids 2-160 (end), contains an N-terminal His-Tag (6xHis). Recombinant Spk2, encompassing amino acids 2-424(end), contains an N-terminal FLAG-tag. Rbx1, full length, encompassing amino acids 2-108(end) contains an N-terminal His-tag (6xHis). These recombinant proteins are co-expressed in a HEK293 expression system and affinity purified.
Background:	Covalent conjugation to ubiquitin (Ub) is one of the major post-translational modifications that regulates protein stability, function, and localization. Ubiquitination is the concerted action of three enzymes: a Ub-activating enzyme (E1), a Ub-conjugating enzyme (E2), and a Ub ligase (E3). The specificity and efficiency of ubiquitination are largely determined by the E3 enzyme, which directs the last step of the Ub-conjugating cascade by binding to both an E2~Ub conjugate and a substrate protein. This step ensures the transfer of Ub from E2~Ub to the substrate, leading to its mono- or poly-ubiquitination. Cull1, or cullin 1, is part of an E3 ligase complex, the SCF (SKP1 (s-phase kinase associated protein 1)- Cul1- F-box protein) complex, that also involves Skp2 and Rbx1 (RING-box protein 1). The SCF complex is involved in the ubiquitination of proteins that act on cell cycle, signal transduction and transcription, with Cul1 serving as a structural scaffold. Cullins can be used in the context of targeted protein degradation in cancer therapy.
Species:	Human
Construct:	Cul1 (FLAG-2-776(end)) / Skp1 (His-2-160(end)) / Skp2 (FLAG-2-424(end)) / Rbx1 (M5I) (His-2-108(end))
Mutations:	Rbx1: M5I
Concentration:	0.90 mg/ml
Expression System:	HEK293
Purity:	83%
Format:	Aqueous buffer solution.
Formulated In:	40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 0.04% Tween-20, and 20% glycerol
MW:	Cul1: 91 kDa; Skp1: 19 kDa; Skp2: 49 kDa; Rbx1: 13 kDa
Genbank Accession:	Cul1: NM_003592.3; Skp1: NM_006930.4; Skp2: NM_005983.4; Rbx1: NM_014248
Stability:	At least 6 months at -80°C.
Storage:	-80°C
Instructions for Use:	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
Applications:	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

Cul1/Skp1/Skp2/Rbx1 (M5I) Complex Recombinant

Catalog: 101755
Lot: 230725-1

Quality Control Data

4-20% SDS-PAGE Coomassie Staining

