Product Name: FBXO42 / SKP1

Alternate Names: FBX42, JFK, KIAA1332

Product Code: TE3-127

FOR RESEARCH USE ONLY (RUO)

Verified Applications / Usage

The recombinant FBXO42 / SKP1 complex has been functionally validated for CUL1/RBX1-dependent *in vitro* ubiquitylation assays, where it supports reconstitution of active SCF E3 ligase complexes for studies of substrate ubiquitylation, E3 ligase mechanism, and targeted protein degradation workflows.

Physical Characteristics

Species: Human

Predicted MW (kDa):
FBXO42: 49 kDa
SKP1: 19 kDa

Source: *E. coli* BL21

Purity: 85 %

Tags:
FBXO42: N-His_6
SKP1: Untagged

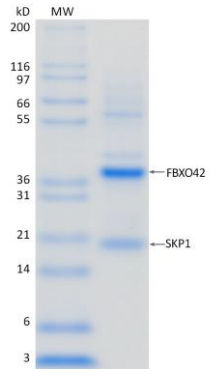
Formulation: 40 mM HEPES, 200 mM NaCl, 10% Glycerol, 2 mM TCEP, 1 mM EDTA, pH 7.6

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. Aliquot and store ≤ -70°C (stable for 24 months from date of receipt).

Quality Assurance

Purity & SDS-PAGE



2 µg FBXO42 / SKP1 run on 4-12% SDS-PAGE gel under reducing conditions, then visualized with Colloidal Coomassie Blue Stain.

Protein ID: F-box only protein 42
S-phase kinase-associated protein 1

Activity Assay

Verified in Ubiquitylation Assay with CUL1/RBX1.

Background

Description

FBXO42 is an F-box substrate receptor that associates with SKP1 to form the substrate recognition module of the SCF (SKP1-CUL1-RBX1) E3 ubiquitin ligase complex. The recombinant FBXO42 / SKP1 complex contains an N-His_6 on FBXO42 and untagged SKP1 and is well suited for *in vitro* ubiquitylation assays, SCF complex reconstitution, ligand discovery, and targeted protein degradation studies.

Accession Number: Q6P3S6

Entrez Gene ID: FBXO42

Accession Number: P63208

Entrez Gene ID: SKP1

Protein Sequence

FBXO42:

MSDQEAKPSTEDLGDKKEGEYIKLKVIGQDSSEIHFKVKMTTHLKKLKESYCQRQGVPMNSLR
FLFEGQRIADNHTPKELGMEEEDVIEVYQEQTGGMHHHHHHGSEPHPVLEAEETRHNRSMSEL
PEEVLEYILSFLSPYQEHKTAALVCKQWYRLIKGVAHQCYHGFMKAVQEGNIQWESRTYPYPG
TPITQRFSHSACYYDANQSMYVFGGCTQSSCNAAFNDLWRLDLNSKEWIRPLASGSYPSPKAG
ATLVVYKDLLVLFGGWTRPSPYPLHQPERFFDEIHTYSPSKNWWNCIVTTHGPPPMAGHSSCV
IDDKMIVFGGSLGSRQMSNDVWVLDLEQWAWSKPNISGPSPHPRGGQSQIVIDDATILILGGC
GGPNALFKDAWLLHMHSGPWAWQPLKVENEEHGAPELWCHPACRVGQCVVVFSQAPS

SKP1:

MASIKLQSSDGEIFEVDVEIAKQSVTIKTMLEDLGMDDEGDDDPVPLPNVNAAILKKVIQWCT
HHKDDPPPPEDDENKEKRTDDIPVWDQEFLKVDQGTLFELILAANYLDIKGLLDVTCKTVANM
IKGKTPEEIRKTFNIKNDFTEEEEAQVRKENQWCEEK