

Recombinant Human ELOB/ELOC/VHL Complex

Catalog Number: E3-600

DESCRIPTION	
Source	Spodoptera frugiperda, Sf 21 (baculovirus)-derived human ELOB/ELOC/VHL Complex protein
	Met1 - Gln118 (ELOB), Met1 - Cys112 (ELOC), Met1 - Asp213 (VHL)
	Accession # Q15370.1 (ELOB), Q15369.1 (ELOC), P40337.2 (VHL)
Predicted Molecular	24 kDa (VHL), 13.1 kDa (ELOB), 12.8 kDa (ELOC)
Mass	

SPECIFICATIONS	
Activity	Typical protein concentration for use in vitro will depend on experimental conditions.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.
Formulation	Supplied as a solution in HEPES, NaCl, DTT and Glycerol. See Certificate of Analysis for details.

PREPARATION AND STORAGE	
Shipping	The product is shipped with dry ice or equivalent. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. • 6 months from date of receipt, -70 °C as supplied.
	3 months, -70 °C under sterile conditions after opening.

BACKGROUND

Together, Elongin B (ELOB) and Elongin C (ELOC) form a heterodimer that serves as the regulatory subunit for the Elongin complex--a general transcription elongation factor that increases RNA Polymerase II transcription through template-encoded arresting sites. The ELOB/ELOC complex also binds to the "BC-box motif" found in many proteins in the VHL-box and SOCS-box protein families. In this function, ELOB/ELOC serves as an adapter between substrate recognition proteins and either Cullin-2/Rbx1 (in VHL-box E3 Ubiquitin ligases) or Cullin-5/Rbx2 (in SOCS-box E3 Ubiquitin ligases). VHL (von Hippel-Lindau disease tumor suppressor) is the substrate recognition subunit for an E3 ligase activity that ubiquitinates proteins containing hydroxyproline residues. Targets of VHL include HIF1 α, β2 adrenergic receptor, ZHX2 and others.

References:

- 1. Kamura T., et al. (1998) Genes Dev. 12:3872.
- 2. Okumura F., et al. (2012) Front. Oncol. 2:10.
- 3. Xie L., et al. (2009) Sci. Signal. 2:ra33.
- 4. Zhang J. et al. (2018) Science 361:290.