# Human Elongin B&Elongin C&VHL Heterotrimer Protein, Strep II Tag&Strep II Tag&His Tag (MALS&SPR verified)

Catalog # ELL-H5595

## Synonym

Elongin B & Elongin C & VHL, ELOB & ELOC & VHL Complex, Elongin B & Elongin C & VHL Complex

## Source

Human Elongin B&Elongin C&VHL Heterotrimer Protein, Strep II Tag&Strep II Tag&His Tag(ELL-H5595) is expressed from Baculovirus-Insect cells. It contains AA Asp 2 - Gln 118 (Elongin B) & Asp 2 - Cys 112 (Elongin C) & Pro 2 - 213 Asp (VHL) (Accession # Q15370-1 (Elongin B) & Q15369-1 (Elongin C) & P40337-2 (VHL)).
Predicted N-terminus: Met (Elongin B) & Met (Elongin C) & Met (VHL)

## Molecular Characterization

Human Elongin B&Elongin C&VHL Heterotrimer Protein, Strep II Tag&Strep II Tag&His Tag, produced by co-expression of Elongin B and Elongin C and VHL, has a calculated MW of 14.5 kDa (Elongin B) and 13.8 kDa (Elongin C) and 25.8 kDa (VHL). Subunit Elongin B is fused with a Strep II tag at the N-terminus and Elongin C is fused with a Strep II tag at the N-terminus and VHL is fused with a polyhistidine tag at the N-terminus. The protein migrates as 17 kDa (Elongin B) and 14 kDa (Elongin C) and 30 kDa (VHL) under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Endotoxin

Less than 1.0 EU per μg by the LAL method.

## Purity

>95% as determined by SDS-PAGE.

## Formulation

Supplied as 0.2 μm filtered solution in 50 mM HEPES, 200 mM NaCl, 20% Glycerol, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

## Shipping

***This product is supplied and shipped with dry ice, please inquire the shipping cost.***

## Storage

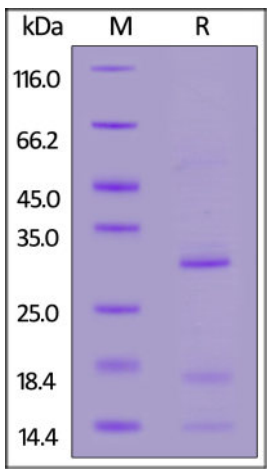
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

***Please avoid repeated freeze-thaw cycles.***

This product is stable after storage at:

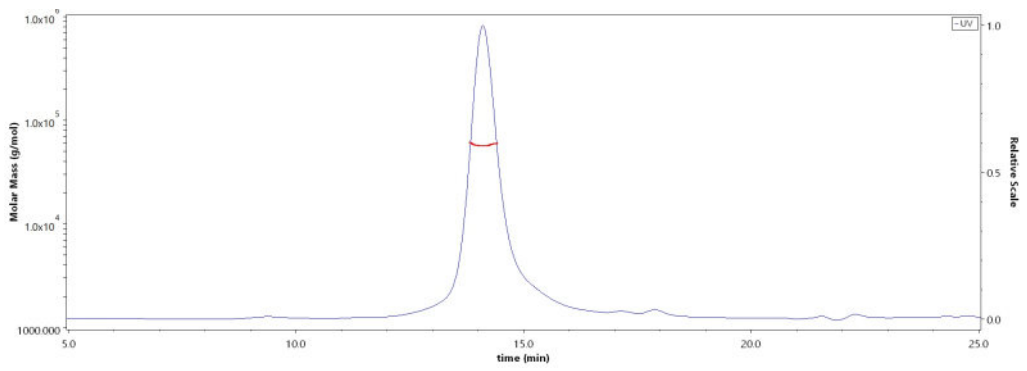
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 12 months under sterile conditions after reconstitution.

## SDS-PAGE




Human Elongin B&Elongin C&VHL Heterotrimer Protein, Strep II Tag&Strep II Tag&His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

## SEC-MALS




The purity of Human Elongin B&Elongin C&VHL Heterotrimer Protein, Strep II Tag&Strep II Tag&His Tag (Cat. No. ELL-H5595) is more than 85% and the molecular weight of this protein is around 51-63 kDa verified by SEC-MALS. Report

## Bioactivity-SPR

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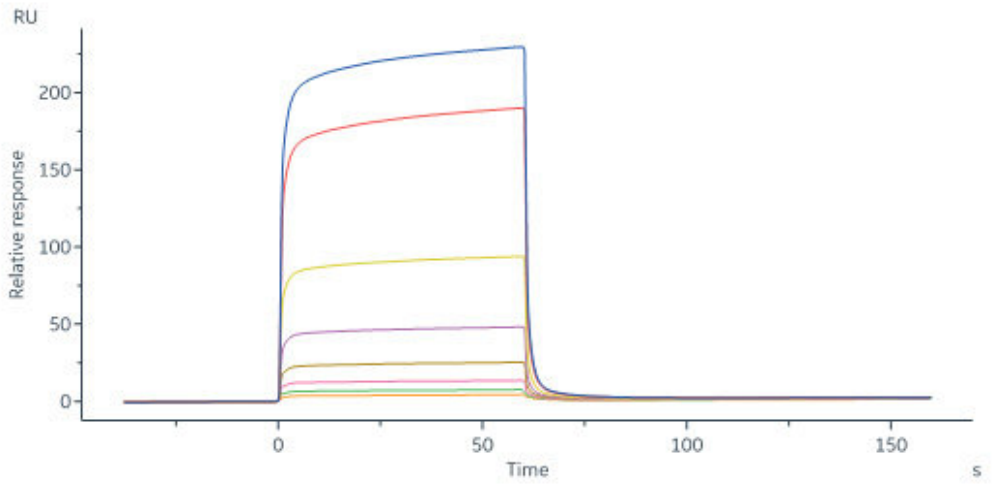


Human Elongin B&Elongin C&VHL Heterotrimer Protein, Strep II Tag&Strep II Tag&His Tag (Cat. No. ELL-H5595) immobilized on CM5 Chip can bind MZ1 with an affinity constant of 275 μM as determined in a SPR assay (Biacore 8K) (QC tested).

## Background

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 is involved in the ubiquitination and subsequent proteasomal degradation via the von Hippel-Lindau ubiquitination complex. It seems to act as a target recruitment subunit in the E3 ubiquitin ligase complex and recruits hydroxylated hypoxia-inducible factor (HIF) under normoxic conditions. Involved in transcriptional repression through interaction with HIF1A, HIF1AN and histone deacetylases.

## Clinical and Translational Updates

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