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 - Asp 213 (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

Strep II	Elongin B (Asp 2 - Gln 118) Q15370-1
Strep II	Elongin C (Asp 2 - Cys 112) Q15369-1
Poly-his	VHL (Pro 2 – Asp 213) P40337-2

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 / rFC method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Supplied as $0.2 \mu m$ 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

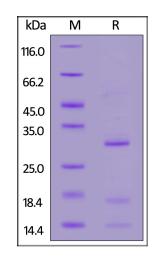
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

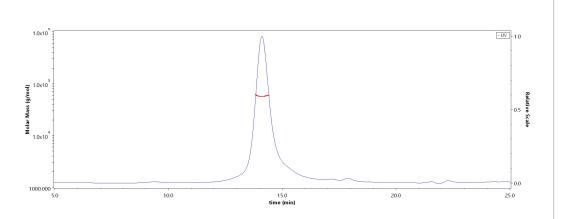
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 12 months under sterile conditions after reconstitution.

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

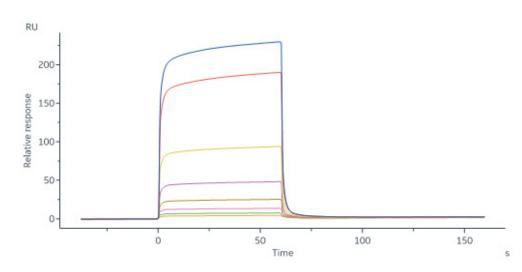


Human Elongin B&Elongin C&VHL Heterotrimer Protein, Strep II Tag&Strep II Tag&His Tag (MALS&SPR verified)

Catalog # ELL-H5595



Bioactivity-SPR



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 μ M 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.

