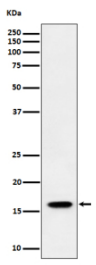
ELOB Antibody / Elongin B [clone 30E87] (FY12605)

Catalog No.	Formulation	Size
FY12605	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	30E87
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q15370
Applications	Western Blot : 1:500-1:2000
Limitations	This ELOB antibody is available for research use only.



Western blot analysis of TCEB2/ELOB expression in human HeLa cell lysate using ELOB antibody. Western blot shows a band at ~16 kDa, higher than the calculated ~13 kDa, consistent with the known slower SDS-PAGE migration of small ubiquitin-like proteins such as Elongin B.

Description

ELOB antibody detects elongin-B, a transcriptional regulatory protein encoded by the ELOB gene. Elongin-B is a subunit of the elongin complex, which also includes elongin-C and elongin-A. This complex functions as a transcription elongation factor that enhances the rate of RNA polymerase II mediated transcription by suppressing transient pausing. In addition, elongin-B and elongin-C form a stable heterodimer that associates with cullin-RING ubiquitin ligases, linking ELOB to protein degradation pathways.

ELOB antibody is widely applied in molecular biology, transcription, and ubiquitin proteasome system research. Through its participation in the elongin complex, ELOB regulates transcriptional control of genes involved in growth, survival, and stress responses. In ubiquitination, ELOB contributes to assembly of the von Hippel-Lindau tumor suppressor complex, which targets hypoxia-inducible factors for degradation. By detecting elongin-B, researchers can investigate how ELOB coordinates transcription and protein turnover.

Western blot assays detect ELOB protein in nuclear extracts, while immunohistochemistry maps expression in diverse tissues. Immunofluorescence reveals localization in nuclei and cytoplasmic ubiquitin ligase complexes. These applications enable comprehensive study of elongin-B across cellular pathways.

Altered ELOB function has been associated with cancer, where deregulated ubiquitination and transcription drive tumor progression. Mutations affecting the VHL-elongin-C-B complex contribute to renal cell carcinoma by stabilizing hypoxia-inducible factors. By applying ELOB antibody, scientists can explore its role in tumor suppression, protein degradation, and transcriptional regulation.

Beyond oncology, elongin-B plays roles in stress responses and cellular adaptation to hypoxia. Its broad functions reflect its integration of gene expression and protein stability mechanisms. This versatility makes ELOB antibody valuable for both basic and disease related research.

ELOB antibody from NSJ Bioreagents provides strong specificity for detecting elongin-B in transcription and ubiquitination studies. Its proven reliability across applications ensures accurate detection in a variety of biological contexts.

Application Notes

Optimal dilution of the ELOB antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human TCEB2 was used as the immunogen for the ELOB antibody.

Storage

Store the ELOB antibody at -20oC.