



LD Biopharma, Inc.
9924 Mesa Rim Road Suite B
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- PRODUCT DATA SHEET -

Name of Product: Recombinant Human UCK2 Protein
Catalog Number: hRP-0866
Manufacturer: LD Biopharma, Inc.

Introduction

This gene encodes a pyrimidine ribonucleoside kinase. The encoded protein catalyzes phosphorylation of uridine and cytidine to uridine monophosphate (UMP) and cytidine monophosphate (CMP), respectively. mRNA profiling data indicated that UCK2 is dominantly expressed in human placenta tissue. Recent data also demonstrated that UCK2 activities maybe involved in human B cell proliferation during EBV viral infection.

Full-length human UCK2 (261 aa) gene was constructed with 19 aa N-terminal T7 tag and expressed in E.coli as inclusion bodies. The final product was refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified.

Gene Symbol: UCK2 (TSA903; UK; UMPK)
Accession Number: NP_036606
Species: Human
Size: 20 µg / Vial
Composition: 0.2 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, sucrose and DTT.
Storage: In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

Key References

Kashuba,E., et al., *Epstein-Barr virus encoded nuclear protein EBNA-3 binds a novel human uridine kinase/uracil phosphoribosyltransferase*. BMC Cell Biol. 3, 23 (2002)

Smith,A.J., et al., *Quantum mechanics/molecular mechanics investigation of the mechanism of phosphate transfer in human uridine-cytidine kinase 2*. Org. Biomol. Chem. 7 (13), 2716-2724 (2009)



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Applications

1. May be used for in vitro UCK2 mediated phosphorylation of uridine-cytidine regulation study with intracellular delivery of this protein.
2. As soluble / native protein, may be used as enzymatic substrate protein for kinase and ubiquitin assay development.
3. May be used for mapping UCK2 protein-protein interaction.
4. May be used as antigen for specific antibody development.

Quality Control

1. Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGEFGSTSMAGDSEQTLQNHQQPNGGEPFLIGVSGGTASGKSSVCAKIVQLLG
QNEVDYRQKQVVILSQDSFYRVLTSEQKAKALKGQFNFDHPDAFDNELILKTLKEITEGKTVQI
PVYDFVSHSRKEETVTVYPADVVLFEFILAFYSQEVRLDFQMKLFVDTDADTRLSSRVLRDISE
RGRDLEQILSQYITFVKPAFEEFCLPTKKYADV IIPRGADNLVAINLIVQHIQDILNGGPSKRQ
TNGCLNGYTPSRKRQASESSSRPH