

LD Biopharma, Inc. 9924 Mesa Rim Road Suite B San Diego, CA 92121 Tel: 858-876-8266 http://www.ldbiopharma.com

### - PRODUCT DATA SHEET -

Name of Product: Recombinant Human SNRPC Protein

**Catalog Number:** hRP-1560

**Manufacturer:** LD Biopharma, Inc.

#### Introduction

Human U1 small nuclear ribonucleoprotein C (SNRPC) gene encodes one of the specific protein components of the U1 small nuclear ribonucleoprotein (snRNP) particle required for the formation of the spliceosome. The encoded protein participates in the processing of nuclear precursor messenger RNA splicing. snRNP particles are attacked by auto-antibodies frequently produced by patients with connective tissue diseases.

Full-length human SNRPC (158aa) gene was constructed with 29 aa N-terminal T7 / His / TEV cleavage site Tags 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: SNRPC (U1C; Yhc1)

**Accession Number:** NP 003084.1

**Species:** Human

Size:  $20 \mu g / Vial$ 

**Composition:** 0.2 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with

proprietary formulation of NaCl, KCl, EDTA, Sucrose, 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**

Hochleitner EO, et al., *Protein stoichiometry of a multiprotein complex, the human* spliceosomal U1 small nuclear ribonucleoprotein: absolute quantification using isotope-coded tags and mass spectrometry J. Biol. Chem. 280 (4), 2536-2542 (2005)

Forch P, et al., The splicing regulator TIA-1 interacts with U1-C to promote U1 snRNP



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recruitment to 5' splice sites. EMBO J. 21 (24), 6882-6892 (2002)

Gunnewiek JM, et al., *Homodimerization of the human U1 snRNP-specific protein C.* Nucleic Acids Res. 23 (23), 4864-4871 (1995)

## **Applications**

- 1. May be used as <u>auto-antibodies detection reagent</u>, which will react with sera of some auto-immuno-diseases and cancer patients.
- 2. May be used for in vitro human SNRPC mediated RNA splicing pathway regulation study by intracellularly delivery this protein with "ProFectin" reagent.
- 3. May be used for SNRPC protein-protein interaction assay.
- 4. May be used as specific substrate protein for kinase, and ubiquitin (Sumo pathway) related enzyme functional screening assays.
- 5. As antigen for specific antibody production.

# **Quality Control**

Purity: > 90% by SDS-PAGE.

# **Recombinant Protein Sequence**

MASMTGGQQMGRGHHHHHHENLYFQGGEFPKFYCDYCDTYLTHDSPSVRKTHCSGRKHKENVKD YYQKWMEEQAQSLIDKTTAAFQQGKIPPTPFSAPPPAGAMIPPPPSLPGPPRPGMMPAPHMGGP PMMPMMGPPPGMMPVGPAPGMRPPMGGHMPMMPGPPMMRPPARPMMVPTRPGMTRPDR