

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 NAA20 Protein

**Catalog Number:** hRP-0852

**Manufacturer:** LD Biopharma, Inc.

#### Introduction

Human N-alpha-acetyltransferase 20 (NAA20) is a component of N-acetyltransferase complex B (NatB). Human NatB performs cotranslational N (alpha)-terminal acetylation of methionine residues when they are followed by asparagine. NatB activities has been linked to regulate mTOR signaling pathway, which involved in many tumorigenesis.

Full-length human NAA20 (178 aa, Isoform-A) gene was constructed with 15 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:** NAA20 (NAT3; NAT5)

**Accession Number:** NP\_057184

**Species:** Human

Size:  $50 \mu g / Vial$ 

**Composition:** 1.0 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**

Evjenth,R., *Human Naa50p (Nat5/San) displays both protein N alpha- and N epsilon-acetyltransferase activity.* J. Biol. Chem. 284 (45), 31122-31129 (2009)

Starheim, K.K., et al., *Identification of the human N(alpha)-acetyltransferase complex B* (hNatB): a complex important for cell-cycle progression. Biochem. J. 415 (2), 325-331 (2008)

Jiang, B., et al., Peptide mimic isolated by autoantibody reveals human arrest defective 1



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overexpression is associated with poor prognosis for colon cancer patients. Am. J. Pathol. 177 (3), 1095-1103 (2010)

# **Applications**

- 1. May be used for in vitro NatB mediated cell cycle 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 NAA20 protein-protein interaction.
- 4. Potential diagnostic biomarker for cancer.
- 5. May be used as antigen for specific antibody development.

## **Quality Control**

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

## **Recombinant Protein Sequence**

MASMTGGQQMGRGEFMTTLRAFTCDDLFRFNNINLDPLTETYGIPFYLQYLAHWPEYFIVAEAP GGELMGYIMGKAEGSVAREEWHGHVTALSVAPEFRRLGLAAKLMELLEEISERKGGFFVDLFVR VSNQVAVNMYKQLGYSVYRTVIEYYSASNGEPDEDAYDMRKALSRDTEKKSIIPLPHPVRPEDI E