Lin28-TAT, Human Recombinant

CATALOG #: P1010-20 20 µg
P1010-100 100 µg

ALTERNATE NAMES: CSDD1, LIN28A, ZCCHC1, Protein lin-28 homolog A, Zinc finger CCHC domain-containing protein 1

SOURCE: *E.Coli*

SEQUENCE: Full length human Lin28 with 13-residue C-terminal TAT peptide (GGYGRKKRRQRRR)

MOLECULAR WEIGHT: 24.4 kDa

PURITY: > 95% determined by SDS - PAGE

FORM: Lyophilized from 10mM Sodium Citrate, pH 3.0. Endotoxin level is < 1 EU/µg

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in sterile deionized water to a concentration of 0.1-1.0 mg/ml. Do not vortex. Additional carrier protein (example 0.1% BSA) is recommended for long term storage.

STORAGE CONDITIONS: Lyophilized protein is stable at -80°C for 12 months. Reconstituted proteins can store at 4°C for one week or at -80˚C for 3 months. Avoid repeated freezing and thawing cycles.

DESCRIPTION: 'Translational enhancer' that drives specific mRNAs to polysomes and increases the efficiency of protein synthesis. Its association with the translational machinery and target mRNAs results in an increased number of initiation events per molecule of mRNA and, indirectly, in mRNA stabilization. Binds IGF2 mRNA, MYOD1 mRNA, ARBP/36B4 ribosomal protein mRNA and its own mRNA. Essential for skeletal muscle differentiation program through the translational up-regulation of IGF2 expression. Suppressor of microRNA (miRNA) biogenesis, including that of let-7, miR107, miR-143 and miR-200c. Specifically binds miRNA precursors (pre-miRNAs), recognizing an 5'-GGAG-3' motif found in pre-miRNA terminal loop, and recruits ZCCHC11/TUT4 uridylyltransferase. This results in the terminal uridylation of target pre-miRNAs. Uridylated pre-miRNAs fail to be processed by Dicer and undergo degradation. The repression of let-7 expression is required for normal development and contributes to maintain the pluripotent state by preventing let-7-mediated differentiation of embryonic stem cells.

RELATED PRODUCTS:

- Lin28 Antibody **(Cat. No. 3091-200)**
- Lin28 Blocking Peptide **(Cat. No. 3091BP-50)**
- BAZ2B bromodomain (2064-2168 aa) (GST-tagged), Human recombinant (Cat No. 7654-20, -100)

FOR RESEARCH USE ONLY! Not to be used in humans.