



Human LIN28A peptide (DAG-P1724)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description

Acts as a 'translational enhancer', driving specific mRNAs to polysomes and thus increasing 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 stabilizing the mRNAs. 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 (By similarity). Acts as a suppressor of microRNA (miRNA) biogenesis by specifically binding the precursor let-7 (pre-let-7), a miRNA precursor. Acts by binding pre-let-7 and recruiting ZCCHC11/TUT4 uridylyltransferase, leading to the terminal uridylation of pre-let-7. Uridylated pre-let-7 miRNAs fail to be processed by Dicer and undergo degradation. Degradation of pre-let-7 in embryonic stem (ES) cells contributes to the maintenance of ES cells. In contrast, LIN28A down-regulation in neural stem cells by miR-125, allows the processing of pre-let-7. Specifically recognizes the 5'-GGAG-3' motif in the terminal loop of pre-let-7. Also recognizes and binds non pre-let-7 pre-miRNAs that contain the 5'-GGAG-3' motif in the terminal loop, leading to their terminal uridylation and subsequent degradation.

Specificity	Expressed in embryonic stem cells (ES cells), placenta and testis.
Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the lin-28 family.Contains 2 CCHC-type zinc fingers.Contains 1 CSD (cold-shock) domain.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	LIN28A lin-28 homolog A (C. elegans) [Homo sapiens (human)]
Official Symbol	LIN28A
Synonyms	LIN28A; lin-28 homolog A (C. elegans); CSDD1; LIN28; LIN-28; ZCCHC1; lin-28A; protein lin-28 homolog A; RNA-binding protein LIN-28; zinc finger, CCHC domain containing 1; zinc finger CCHC domain-containing protein 1;
Entrez Gene ID	79727
mRNA Refseq	NM_024674.4
Protein Refseq	NP_078950.1
UniProt ID	Q9H9Z2
Chromosome Location	1p36.11
Pathway	Cardiac Progenitor Differentiation, organism-specific biosystem;
Function	DNA binding; RNA binding; mRNA binding; miRNA binding; protein binding; translation initiation factor binding; zinc ion binding;