

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human LIN-28B in direct ELISAs and Western blots. In direct ELISAs, less than 4% cross-reactivity with recombinant human LIN-28A is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human LIN-28B Val83-Thr250 Accession # Q6ZN17
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Lin-28B (Lineage protein 28 homolog B) is a 35-37 kDa member of the Lin28 family of proteins. Although there is an accompanying Lin-28/28A molecule, Lin-28 and Lin-28B are not alternative splice forms but represent products of separate genes. Lin-28B is found in both the cytoplasm and nucleus of fetal hematopoietic stem and progenitor cells, embryonic liver and multiple tumor types. It is considered a regulator of miRNA activity. Active miRNAs arise from transcribed RNAs that are first cleaved by nuclear RNase III, next cleaved by cytoplasmic Dicer, and finally associate with Argonaute to generate a RISC RNA silencing complex. Lin-28A participates in the cytoplasmic uridylation of miRNAs on their 3'-end, blocking Dicer processing and initiating RNA degradation. Lin-28B, by contrast, acts in the nucleus and blocks the initial RNase III cleavage step. Human Lin-28B is 250 amino acids (aa) in length (SwissProt # Q6ZN17). It contains one CSD/cold shock domain (aa 29-102) plus two CCHC-type Zn-finger RNA binding domains (aa 127-144 and 149-166). Phosphorylation is known to occur on Ser105. There is one reported alternate start site at Met71, and there is a potential 11 aa substitution for aa 1-4. Two isoforms of LIN28B with apparent MWs of 22 kDa and 37 kDa have been reported. Over aa 83-250, human Lin-28B shares 84% aa sequence identity with mouse Lin-28B.

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