

LIN-28 (EP150)

Rabbit anti-human LIN-28 Monoclonal Antibody (Clone EP150)

REFERENCES AND PRESENTATIONS¹

- ready-to-use (manual or LabVision AutoStainer)
 MAD-000591QD–3
 MAD-000591QD–7
 MAD-000591QD–12
- Ready-to-use (MD-Stainer)² MAD-000591QD-3/V MAD-000591QD/V
- concentrated MAD-000591Q - 1:50 recommended dilution

COMPOSITION:

Anti-human LIN-28 rabbit monoclonal antibody purified from serum and prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide

INTENDED USE The Immunohistochemistry (IHC) on paraffin embedded tissues. Not tested on frozen tissues or Western-Blotting

CLONE: EP150³

Ig ISOTYPE: IgG

IMMUNOGEN: A synthetic peptide corresponding to residues on the C-terminus of human LIN28A protein **SPECIES REACTIVITY:** In vitro diagnostics in humans. Not tested in other species

DESCRIPTION AND APPLICATIONS:

LIN28 is a highly conserved, RNA-binding protein (RBP). It plays an important role as a translational enhancer, leading specific mRNAs to polysomes and therefore increasing the competence of protein synthesis. LIN28 was identified as a negative regulator of miRNA biogenesis and suggested to play a central role in blocking miRNAmediated differentiation in stem cells and certain cancers.

LIN28 is expressed by various undifferentiated embryonic cell types. Anti- LIN28 has been used as a sensitive marker for germ cell tumors. The positive staining of LIN28 in yolk sac tumors showed an

Vitro S.A.

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advantage over OCT4, which is negative in these tumors.

The nuclear reactivity of this antibody maybe observed in the myoepithelial cells of the salivary gland.

IHC POSITIVE CONTROL: Germ cell tumor for abnormal tissue.

VISUALIZATION: Cell membrane and cytoplasm

IHC RECOMMENDED PROCEDURE:

- $4\mu m$ thick section should be taken on charged slides; dry overnight at $60^{\circ}C$
- Deparaffinise, rehydrate and HIER (heat induced epitope retrieval) boil tissue in the Pt Module using Vitro S.A Citrate buffer pH6⁴ for 20 min at 95°C. Upon completion rinse with 3-5 changes of distilled or deionised water followed by cooling at RT for 20 min
- Endogenous peroxidase block Blocking for 10 minutes at room temperature using peroxidase solution (ref. MAD-021540Q-125)
- Primary antibody: incubate for 10 minutes [The antibody dilution (when concentrated) and protocol may vary depending on the specimen preparation and specific application. Optimal conditions should be determined by the individual laboratory]
- For detection use Master Polymer Plus Detection System (HRP) (DAB included; ref. MAD-000237QK)
- Counterstaining with haematoxylin and final mounting of the slide

STORAGE AND STABILITY: Stored at 2-8°C. Do not freeze. Once the packaging has been opened it can be stored until the expiration date of the reagent indicated on the label. If the reagent has been stored under other conditions to those indicated in this document, the user must first check its correct performance taking into account the product warranty is no longer valid.

WARNINGS AND PRECAUTIONS:

1. Avoid contact of reagents with eyes and mucous membranes. If reagents come into contact with sensitive areas, wash with copious amounts of water.

2. This product is harmful if swallowed.

3. Consult local or state authorities with regard to recommended method of disposal.

⁴ Ref: MAD-004071R/D





¹ These references are for presentation in vials of Low Density Polyethylene (LDPE) dropper. In case the products are used in automated stainers, a special reference is assigned as follows:

 [/] L: Cylindrical screw-cap vials (QD-3 / L, QD-7 / L, QD-12 / L).
/ N: Polygonal screw-cap vials (QD-3 / N, QD-7 / N, QD-12 / N).

^{- /} N: Polygonal screw-cap vials (QD-3 / N, QD-1 / N, QD-12 / N). For different presentations (references / volumes) please contact the supplier.

² For Technical specifications for MD-Stainer, please contact your distributor.

³ Lin28 clone EP150 is manufactured using Epitomics's RabMAb® technology under U.S. Patent Nos. 5,675,063 and 7,402,409



4. Avoid microbial contamination of reagents.

SAFETY RECOMMENDATIONS:

This product is intended for laboratory professional use only. The product is NOT intended to be used as a drug or for domestic purposes. The current version of the Safety Data Sheet for this product can be downloaded by searching the reference number at <u>www.vitro.bio</u> or can be requested at <u>regulatory@vitro.bio</u>.

BIBLIOGRAPHY:

1.Cao D, Allan RW, Cheng L, Peng Y, Guo CC, Dahiya N, Akhi S, Li J. RNA-binding protein LIN28 is a marker for testicular germ cell tumors. Hum Pathol. 2011 May;42(5):710-8

2. Xue D, Peng Y, Wang F, Allan RW, Cao D. RNAbinding protein LIN28 is a sensitive marker of ovarian primitive germ cell tumours. Histopathology. 2011 Sep;59(3):452-9

3. Hamano R, Miyata H, Yamasaki M, Sugimura K, Tanaka K, Kurokawa Y, Nakajima K, Takiguchi S, Fujiwara Y, Mori M, Doki Y. High expression of Lin28 is associated with tumour aggressiveness and poor prognosis of patients in oesophagus cancer. Br J Cancer. 2012 Apr 10;106(8):1415-23

4. Rodini CO, Suzuki DE, Saba-Silva N, Cappellano A, de Souza JE, Cavalheiro S, Toledo SR, Okamoto OK. Expression analysis of stem cell-related genes reveals OCT4 as a predictor of poor clinical outcome in medulloblastoma. J Neurooncol. 2012 Jan;106(1):71-9 5. Xu C, Shen J, Xie S, Jiang Z, Huang L, Wang L. Positive expression of Lin28 is correlated with poor survival in gastric carcinoma. Med Oncol. 2013 Mar;30(1):382. doi: 10.1007/s12032-012-0382-x

LABEL AND BOX SYMBOLS

Explanation of the symbols of the product label and box:

	Expiration date
X	Temperature limit
	Manufacturer
X	Sufficient content for <n> assays</n>
REF	Catalog number
LOT	Lot code
Ĩ	Refer to the instructions of use
IVD	Medical product for <i>in</i> vitro diagnosis.
e-SDS	Material safety data sheet



