

CD7 (EP132)

Rabbit anti-human CD7 Monoclonal Antibody (Clone EP132)

REFERENCES AND PRESENTATIONS¹

- **ready-to-use (manual or LabVision AutoStainer)**
MAD-000603QD-3
MAD-000603QD-7
MAD-000603QD-12
- **Ready-to-use (MD-Stainer)²**
MAD-000603QD-3/V
MAD-000603QD/V
- **concentrated**
MAD-000603Q - 1:50 recommended dilution

COMPOSITION

Anti-human CD7 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 : Immunohistochemistry (IHC) on paraffin embedded tissues. Not tested on frozen tissues or Western-Blotting

CLONE: EP132³

Ig ISOTYPE: Rabbit IgG

IMMUNOGEN: A synthetic peptide corresponding to residues of human CD7 protein.

SPECIES REACTIVITY: In vitro diagnostics in humans. Not tested in other species

DESCRIPTION AND APPLICATIONS: This antibody recognizes a glycoprotein of 40kD molecular weight known as CD7 (also known as TP40 and Leu9). CD7 is positioned at 17q25.2-q25.3 and present on thymocytes, mature T cells, and NK cells. During T cell differentiation, CD7 is one of the earliest lineage markers to appear, therefore, the marker is considered the most clinically useful for acute lymphoid leukemia of T origin. In contrast, the CD7 molecule is absent in some cases as severe combined immunodeficiency.

As the CD7 antigen is expressed in mature and immature T cells and NK cells, including those with mixed myeloid immuophenotype (precursor NK/myeloid cells leukemia), the anti-CD7 antibody is useful for the identification of lymphoid neoplasms derived therefrom. However it should be noted that in the peripheral T-cell lymphomas, frequent deletion or pre- and post-transcriptional regulation can lead to the loss of CD7 expression in the cell membrane, therefore their absence in this case does not rule out the origin of the T neoplasia. It is also not unusual in benign inflammatory dermatoses that reactive T cells do not express CD7, therefore, these histopathological features must be considered in the differential diagnosis

IHC POSITIVE CONTROL: Tonsil

VISUALIZATION: Cell membrane and cytoplasm

IHC RECOMMENDED PROCEDURE:

- 4µm thick section should be taken on charged slides; dry overnight at 60°C
- Deparaffinise, rehydrate and HIER (heat induced epitope retrieval) – boil tissue in the Pt Module using Vitro S.A EDTA buffer pH8⁴ 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

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).

For different presentations (references / volumes) please contact the supplier.

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

³ CD7 bearing EP Clone 132 is manufactured using Epitomics's RabMAb® technology under U.S. Patent Nos. 5,675,063 and 7,402,409

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

⁴ Ref: MAD-004072R/D



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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. 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 www.vitro.bio or can be requested at regulatory@vitro.bio.

BIBLIOGRAPHY

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2. Ware RE, Haynes BF. T cell CD7 mRNA expression is regulated by both transcriptional and post-transcriptional mechanisms. Int Immunol. 1993; **5**:179-87.
3. Hammer RD, Collins RD, Ebrahimi S, Casey TT: Rapid immunocytochemical analysis of acute leukemias. Am J Clin Pathol. 1992;97:876-84. Miwa H, Nakase K, Kita K: Biological characteristics of CD7(+) acute leukemia. Leuk Lymphoma. 1996;21:239-44.
4. Sempowski GD, Lee DM, Kaufman RE, Haynes BF. Structure and function of the CD7 molecule. Crit Rev Immunol. 1999; **19**:331-48.
5. Al Saati T, Alibaud L, Lamant L, Boyes J, March M, Delsol G: A new monoclonal anti-CD7 antibody reactive on paraffin sections. Appl Immunohistochem Mol Morphol. 2001; **9**:289-96.
6. Karube K, Ohshima K, Tsuchiya T, Yamaguchi T, Suefuji H, Suzumiya J, Harada M, Kikuchi M: Non-B, non-T neoplasms with lymphoblast morphology: further clarification and classification. Am J Surg Pathol. 2003; **27**:1366-74.

LABEL AND BOX SYMBOLS

Explanation of the symbols of the product label and box:

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