Cyclin E1 (EP126)

Rabbit anti-human Cyclin E1 Monoclonal Antibody (Clone EP126)

REFERENCES AND PRESENTATIONS[1]

- **ready-to-use (manual or LabVision AutoStainer)**
  MAD-000713QD–3
  MAD-000713QD–7
  MAD-000713QD–12
- **Ready-to-use (MD-Stainer)**[2]
  MAD-000713QD-3/V
  MAD-000713QD/V
- **concentrated**
  MAD-000713Q - 1:50 recommended dilution

COMPOSITION
Anti-human Cyclin E1 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 IVD: Immunohistochemistry (IHC) on paraffin embedded tissues. Not tested on frozen tissues or Western-Blotting
CLONE: EP126[3]
Ig ISOTYPE: IgG
IMMUNOGEN: Recombinant protein corresponding to residues from human protein cyclin E.
SPECIES REACTIVITY: In vitro diagnostics in humans. Not tested in other species
DESCRIPTION AND APPLICATIONS:
This antibody reacts with human protein cyclin E.
E-type cyclins (cyclin E1 and cyclin E2) are expressed during the late G1 phase of the cell cycle and until the end of the S phase. Cyclin E activity is limited by the passage of the cells through the "R" restriction point, which marks a "point of no return" for cells going into division from a quiescent state (G0) or through G1 and S phases. Cyclin E expression is mainly regulated by gene transcription by members of the E2F transcription factor family and by degradation through the proteasome catabolic pathway. Cyclin E binds and activates Cdk2 kinase and, through phosphorylation of this kinase's substrate, the so-called pocket proteins, the cyclin/Cdk2 complex regulates the entry into the S phase by initiating a cascade of events that allows the specific expression of S-phase genes. In addition, cyclin E plays a direct role in the initiation of DNA replication and in the control of genomic and centrosome stability.
Overexpression of cyclin E shortens the G1 phase of the cell cycle, accelerating progression to the S phase. High levels of cyclin E expression have been associated with the initiation and progression of different human neoplasms, particularly breast cancer, leukaemias, and lymphomas, among others.

IHC POSITIVE CONTROL: Tonsil or placenta tissue section.
VISUALIZATION: Nuclear .

IHC RECOMMENDED PROCEDURE:
- 4µm thick section should be taken on charged slides; dry overnight at 60ºC
- Deparaffinise, rehydrate and HIER (heat induced epitope retrieval) – boil tissue in the Pt Module using Vitro S.A Citrate buffer pH6[4] for 20 min at 95ºC. 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 2-8ºC. 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.

[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 Cyclin E1 clone EP126 is manufactured using Epitomics's RabMAb® technology under U.S. Patent Nos. 5,675,063 and 7,402,409

[4] Ref: MAD-004071R/D

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CE IVD

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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8. Camacho F I, García J F, Sánchez-Verde L, et al..Unique phenotypic profile of monocytoid B cells. American Journal of Pathology.158: 1363-1369 (2001).
9. Moroy T, Geisen C. Cyclin E. Int J Biochem Cell Biol. 36: 1424-39 (2004).

LABEL AND BOX SYMBOLS

Explanation of the symbols of the product label and box:

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

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