

Mouse Anti-Cyclin E1 [CCNE1/2460]: MC0249, MC0249RTU7

Intended Use: For Research Use Only

Description: Cyclin E1 is a member of the cyclin E family that can associate with and activate cyclin-dependent kinase Cdk2. Expression of cyclin E1 is essential for the control of the cell cycle at the late G1 and early S phase. Ubiquitination by the Cul-3 pathway and Fbw7 regulates cyclin E1 levels and is critically important in normal cells. In normal cells, cyclin E1 protein expression is tightly controlled through a combination of transcriptional and proteolytic regulatory processes. However, in many types of human tumors, cyclin E1 expression is frequently dysregulated, including overexpression, non-periodic expression relative to cell division, and generation of low molecular weight (LMW) derivatives. Several studies have consistently demonstrated that Cyclin E1 is associated with disease progression or patient survival in various malignancies including carcinomas of the breast, bladder, colon, and ovary. A recent study indicated that cyclin E amplification/overexpression is responsible for trastuzumab resistance in HER2 positive breast cancer patients.

Specifications:

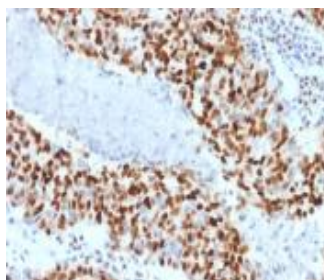
Clone: CCNE1/2460
 Source: Mouse
 Isotype: IgG2b/k
 Reactivity: Human
 Immunogen: Recombinant human Cyclin E protein aa 10-176
 Localization: Nucleus
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC
 Package:

Description	Catalog No.	Size
Cyclin E1 Concentrated	MC0249	1 ml
Cyclin E1 Prediluted	MC0249RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Placenta, breast cancer
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human colon carcinoma stained with anti-Cyclin E1 using DAB

References:

1. miR-503 suppresses the proliferation and metastasis of esophageal squamous cell carcinoma by triggering autophagy via PKA/mTOR signaling. Wu J, et al. Int J Oncol., 2018.
2. Functional inhibition of aquaporin-3 with a gold-based compound induces blockage of cell proliferation. Serna A, et al. J Cell Physiol 229:1787-801, 2014.
3. LRH1 as a driving factor in pancreatic cancer growth. Lin Q, et al. Cancer Lett 345:85-90, 2014.