

Anti-Cyclin E Purified

Catalog #: 14-6714

RUO: For Research Use Only

Product Information

Contents: Anti-Cyclin E Purified

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Clone: Polyclonal

Host/Isotype: Rabbit IgG

Formulation: 200 µg/ml rabbit polyclonal IgG in PBS, 0.1% sodium azide, 0.2% gelatin.

Temperature Limitation: Store at 2-8°C.

Batch Code: Refer to Vial

Use By: Refer to Vial

Caution, contains Azide

Description

The polyclonal antibody reacts with mouse, human, and rat cyclin E; the antibody was raised against a peptide mapping to the carboxy terminus of rat cyclin E. During each cell cycle cyclins undergo periodic accumulation and destruction. As key regulators of the cell cycle the cyclins control important transitions by activating Cdks (1,2). Early in the G1 phase of the cell cycle cyclin D1 induction is followed by cyclin E induction (3,4). This sequential progression is marked early on in G1 by the activation of Cdk4 and in mid to late G1 by the activation of Cdk2 and the hyperphosphorylation of pRB (3,5). The final transition into S phase is thought to be dependent on the increased expression and association of cyclin E and Cdk2 (5,6).

Applications Reported

Purified anti-mo/hu/rat cyclin E poly has been reported for use in immunoprecipitation, immunoblotting (WB), and immunohistochemical staining.

Applications Tested

Purified anti-mo/hu/rat cyclin E poly has been tested by immunoblotting (WB) (1:200 starting dilution).

References

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2. Desdouets C, Sobczak-Thepot J, Murphy M, Brechot C. 1995. Cyclin A: Function and expression during cell proliferation. *Prog Cell Cycle Res* 1:115-123.
3. Musgrove EA, Sarcevic B, Sutherland RL. 1996. Inducible expression of cyclin D1 in T-47D human breast cancer cells is sufficient for Cdk2 activation and pRB hyperphosphorylation. *J Cell Biochem* 60(3): 363-378.
4. Geng Y, Whoriskey W, Park MY, Bronson RT, Medema RH, Li T, Weinberg RA, Sicinski P. 1999. Rescue of cyclin D1 deficiency by knockin cyclin E. *Cell* 97(6): 767-777.
5. Prall OW, Sarcevic B, Musgrove EA, Watts CK, Sutherland RL. 1997. Estrogen-induced activation of Cdk4 and Cdk2 during G1-S phase progression is accompanied by increased cyclin D1 expression and decreased cyclin-dependent kinase inhibitor association with cyclin ECdk2. *J Biol Chem* 272(16): 10882-10894.
6. Sauer K, Lehner CF. 1995. The role of cyclin E in the regulation of entry into S phase. *Prog Cell Cycle Res* 1: 125-139.
7. Arechiga AF, Bell BD, et. al. 2007 A Fas-associated death domain protein/caspase-8-signaling axis promotes S-phase entry and maintains S6 kinase activity in T cells responding to IL-2. *J Immunol* 179:5291-5300. (WB, PubMed)