Anti-Cyclin E2 (RABBIT) Antibody - 600-401-971

Code: 600-401-971 **Size:** 100 µg

Product Description: Anti-Cyclin E2 (RABBIT) Antibody - 600-401-971

Concentration: 1.17 mg/mL by UV absorbance at 280 nm

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Rabbit
Gene Name	CCNE2
Species Reactivity	mouse, human
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
Storage Condition	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Synonyms	G1/S-specific cyclin-E2
Application Note	This affinity purified antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 50 kDa in size corresponding to Cyclin E2 protein by western blotting in the appropriate cell lysate or extract.
Background	This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. Cyclin E was first identified by its ability to rescue growth of yeast deficient in G1 Cyclins, indicating a role in G1 or G1/S transitions. Over-expression of Cyclin E has been observed in a variety of human tumors. Multiple isoforms of Cyclin E are expressed in tumors but not in normal tissues, suggesting a post-transcriptional regulation of Cyclin E. Cyclin E2 associates with Cdk2 in a functional kinase complex that is inhibited by both p27Kip1 and p21Cip1. The catalytic activity associated with Cyclin E2 complexes is cell cycle regulated and peaks at the G1/S transition. Unlike Cyclin E1, which is expressed in most proliferating normal and tumor cells, Cyclin E2 levels were low to undetectable in non-transformed cells and increased significantly in tumor-derived cells.
Purity And Specificity	This affinity purified antibody is directed against mouse Cyclin E2 protein. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with Cyclin E2 protein from human based on 100% homology with the immunizing sequence. Cross-reactivity with Cyclin E2 from rat is also predicted based on a 91% homology with the immunizing sequence. Reactivity against homologues from other sources is not known.
Assay Dilutions	User Optimized
ELISA	1:20,000 - 1:85,000
WESTERN BLOT	1:200 - 1:2,000
OTHER ASSAYS	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids at the carboxyl terminus of the Cyclin E2 protein.
General Reference	Philipp, G.Y., Yu, Q., Sicinska, E., Das, M., Schneider, J.E., Bhattacharya, S., Rideout, W.M., Bronson, R.T., Gardner, H., Sicinski, P. (2003) Cyclin E ablation in the mouse. Cell 114(4):431-443. Yu, Q., Sicinski, P. (2004) Mammalian cell cycles without Cyclin E-CDK2. Cell Cycle 3(3):292-295. Parisi, T., Beck, A.R., Rougier, N., McNeil, T., Lucian, L., Werb, Z., Amati, B. (2003) Cyclins E1 and E2 are required for endoreplication in placental trophoblast giant cells. EMBO J. 22(18):4794-4803. Geng, Y., Yu, Q., Whoriskey, W., Dick, F., Tsai, K.Y., Ford, H.L., Biswas, D.K., Pardee, A.B., Amati, B., Jacks,

T., Richardson, A., Dyson, N., Sicinski, P. (2001) Expression of Cyclins E1 and E2 during mouse development and in neoplasia. Proc. Natl. Acad. Sci. USA 98(23):13138-13143.

Berthet, C., Aleem, E., Coppola, V., Tessarollo, L., Kaldis, P. (2003) Cdk2 knockout mice are viable. Curr. Biol. 13(20):1775-1785.

Aleem, E., Kiyokawa, H., Kaldis, P. (2005) Cdc2-Cyclin E complexes regulate the G1/S phase transition. Nat. Cell Biol. 7(8):831-836.

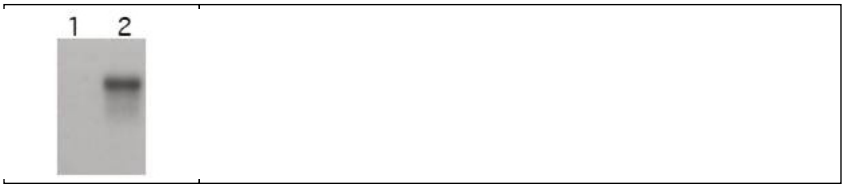
Related Products

100-401-156	Anti-Cyclin E (RABBIT) Antibody - 100-401-156
100-401-172	Anti-p27 (RABBIT) Antibody - 100-401-172
611-1302	Anti-RABBIT IgG (H&L) (GOAT) Antibody Peroxidase Conjugated - 611-1302
FEMTOMAX-110	Chemiluminescent FemtoMax™ Super Sensitive HRP Substrate for Microwell and/or Membrane (2 component system) - FEMTOMAX-110

Related Links

Images

1	Western blot using Rockland's affinity purified anti-Cyclin E2 antibody shows specific detection of Cyclin E2. Cell extracts over-expressing mouse Cyclin E1 (lane 1) and Cyclin E2 (lane 2) were electrophoresed, transferred to nitrocellulose, and probed with the anti-Cyclin E2 antibody. The affinity purified antibody also detects endogenous Cyclin E2 in Skp2-/- MEF cells. (data not shown). Personal Communication, Philipp Kaldis, CCR-NCI, Frederick, MD.



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