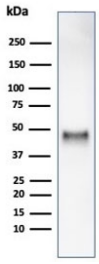
Cyclin E1 Antibody / CCNE1 [clone rCCNE1/4936] (V9151)

Catalog No.	Formulation	Size
V9151-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9151-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9151SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

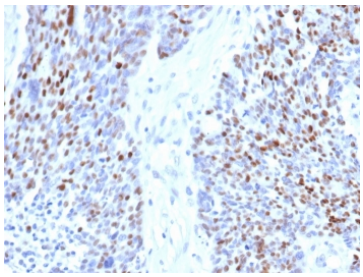
Recombinant MOUSE MONOCLONAL

Bulk quote request

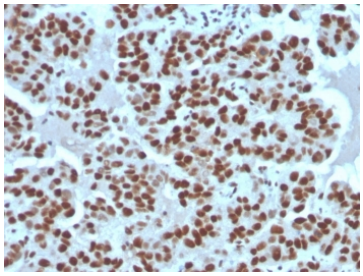
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rCCNE1/4936
Purity	Protein A/G affinity
UniProt	IDP24864
Localization	Nuclear
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This Cyclin E1 antibody is available for research use only.



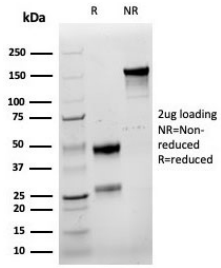
Western blot testing of human HCT116 cell lysate using Cyclin E1 antibody (clone rCCNE1/4936). Predicted molecular weight ~47 kDa.



IHC staining of FFPE human ovarian carcinoma tissue with Cyclin E antibody (clone rCCNE1/4936). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human breast carcinoma tissue with Cyclin E1 antibody (clone rCCNE1/4936). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free recombinant Cyclin E1 antibody (clone rCCNE1/4936) as confirmation of integrity and purity.

Description

Cyclin E1 antibody recognizes Cyclin E1, a key cell cycle regulatory protein encoded by the CCNE1 gene. Also known as G1-S specific cyclin E1, this nuclear protein forms an active complex with cyclin-dependent kinase 2 and drives progression from the G1 phase into S phase of the cell cycle. Cyclin E1 antibody is widely used in research investigating cell proliferation, DNA replication control, and tumor-associated cell cycle dysregulation.

Cyclin E1 accumulates during late G1 phase and reaches peak expression at the G1-S transition, where it promotes phosphorylation of downstream substrates required for initiation of DNA synthesis. The protein contains conserved cyclin box domains that mediate binding to CDK2 and regulate kinase activation. Cyclin E1 is predominantly localized to the nucleus, reflecting its role in coordinating replication origin firing and S phase entry. Tight regulation of CCNE1 expression and proteasomal degradation ensures proper cell cycle timing and genomic stability.

Amplification or overexpression of CCNE1 has been reported in multiple malignancies, including ovarian, breast, lung, and gastric cancers. Elevated Cyclin E1 levels are often associated with increased proliferation rates, genomic instability, and poor clinical prognosis in certain tumor types. Immunostaining typically demonstrates strong nuclear localization in actively cycling cells. Clone rCCNE1/4936 is a recombinant mouse monoclonal antibody generated through defined sequence expression to support lot-to-lot consistency and reproducible performance. This Cyclin E1 antibody enables investigation of cell cycle regulation, tumor biology, and proliferation status in research applications.

Application Notes

Optimal dilution of the Cyclin E1 antibody should be determined by the researcher.

Immunogen

A portion of amino acids 10-176 was used as the immunogen for the Cyclin E1 antibody.

Storage

Aliquot the Cyclin E1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.