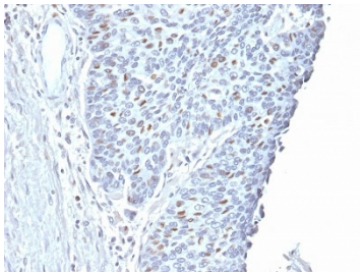
Cyclin A2 Antibody / CCNA2 [clone CCNA2/2333] (V3780)

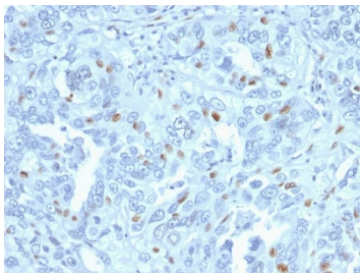
Catalog No.	Formulation	Size
V3780-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3780-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3780SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

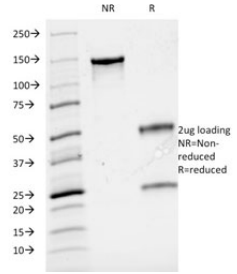
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	CCNA2/2333
Purity	Protein G affinity chromatography
UniProt	P20248
Gene ID	890
Localization	Nuclear, cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Cyclin A2 antibody is available for research use only.



Immunohistochemistry analysis of Cyclin A2 / CCNA2 antibody in human endometrial carcinoma tissue. Formalin-fixed, paraffin-embedded human endometrial carcinoma tissue was stained using Cyclin A2 antibody. Heat-induced epitope retrieval was performed by steaming tissue sections in citrate buffer, pH 6.0, for 20 minutes, followed by cooling prior to antibody incubation. Brown chromogenic signal is observed predominantly in the nuclei of tumor epithelial cells, consistent with proliferative cell populations, while surrounding stromal cells show comparatively reduced staining. This nuclear staining pattern reflects cell cycle-associated expression of Cyclin A2 in endometrial carcinoma.



IHC testing of FFPE human endometrial carcinoma with Cyclin A2 antibody. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



SDS-PAGE analysis of purified, BSA-free Cyclin A2 antibody (clone CCNA2/2333) as confirmation of integrity and purity.

Description

Cyclin A2 Antibody recognizes Cyclin A2, also known as CCNA2, Cyclin A, and Cyclin A isoform 2, a key regulatory protein involved in cell cycle progression. Cyclin A2 is a member of the cyclin family of cell cycle proteins and functions as a regulatory subunit for cyclin-dependent kinases, including CDK2 and CDK1. Cyclin A2 Antibody is frequently described as CCNA2 antibody or Cyclin A antibody and is widely used in studies of cell proliferation, mitosis, and tumor biology.

CCNA2 expression is tightly regulated during the cell cycle and is typically detected in the nucleus of cells during S phase and G2 phase. Cyclin A2 associates with CDK2 to regulate DNA replication during S phase and later interacts with CDK1 to facilitate transition into mitosis. Because of this defined temporal expression pattern, Cyclin A2 is commonly used as a proliferation-associated marker and indicator of actively cycling cells. In tissue sections, Cyclin A2 staining is generally observed as nuclear labeling in proliferating cell populations, while quiescent or terminally differentiated cells show minimal expression.

Altered Cyclin A2 expression has been reported in a wide range of malignancies. Increased CCNA2 levels are often associated with enhanced proliferative activity, high-grade tumors, and aggressive clinical behavior in certain cancer types. Consequently, Cyclin A2 antibody staining patterns are frequently evaluated in research studies examining cell cycle regulation, tumor growth, and mitotic activity. CCNA2 expression is also investigated in developmental biology and regenerative contexts where active cell division is present.

At the molecular level, Cyclin A2 acts as a cell cycle checkpoint regulator that coordinates DNA synthesis and mitotic entry through precise control of cyclin-dependent kinase activity. Its central role in S phase progression and G2-M transition makes Cyclin A2 Antibody a valuable tool for assessing proliferative status, studying cell cycle dynamics, and investigating oncogenic signaling pathways linked to uncontrolled cell division.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the Cyclin A2 antibody to be titered up or down for optimal performance.

Immunogen

Full length protein was used as the immunogen for this CCNA2 antibody.

Storage

Store the Cyclin A2 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

References (1)