ARG41929
anti-Cyclin A1 + Cyclin A2 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Cyclin A1 + Cyclin A2
Tested Reactivity	Hu
Tested Application	IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Cyclin A1 + Cyclin A2
Species	Human
Immunogen	Synthetic peptide of Human Cyclin A1/A2.
Conjugation	Un-conjugated
Alternate Names	Cyclin A1: CT146; Cyclin-A1 Cyclin A2: Cyclin-A2; Cyclin-A; CCN1; CCNA

Application Instructions

Application table

Application	Dilution
IHC-P	1:100 - 1:500
IP	1:50
WB	1:500 - 1:1000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	HeLa
Observed Size	~ 53 kDa

Properties

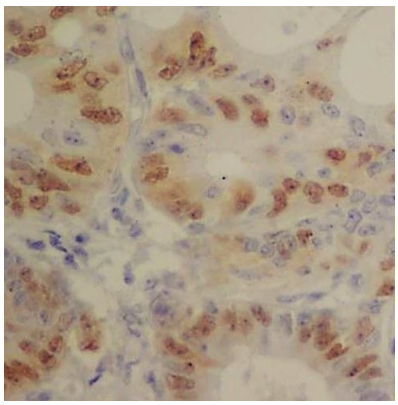
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

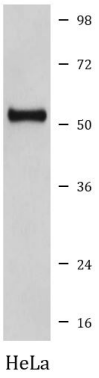
Gene Symbol	CCNA1; CCNA2
Gene Full Name	cyclin A1; cyclin A2
Background	Cyclin A1: The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. The cyclin encoded by this gene was shown to be expressed in testis and brain, as well as in several leukemic cell lines, and is thought to primarily function in the control of the germline meiotic cell cycle. This cyclin binds both CDK2 and CDC2 kinases, which give two distinct kinase activities, one appearing in S phase, the other in G2, and thus regulate separate functions in cell cycle. This cyclin was found to bind to important cell cycle regulators, such as Rb family proteins, transcription factor E2F-1, and the p21 family proteins. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008] Cyclin A2: The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. In contrast to cyclin A1, which is present only in germ cells, this cyclin is expressed in all tissues tested. This cyclin binds and activates CDC2 or CDK2 kinases, and thus promotes both cell cycle G1/S and G2/M transitions. [provided by RefSeq, Jul 2008]
Function	Cyclin A1: May be involved in the control of the cell cycle at the G1/S (start) and G2/M (mitosis) transitions. May primarily function in the control of the germline meiotic cell cycle and additionally in the control of mitotic cell cycle in some somatic cells. [UniProt] Cyclin A2: Essential for the control of the cell cycle at the G1/S (start) and the G2/M (mitosis) transitions. [UniProt]
Calculated Mw	Cyclin A1: 52 kDa Cyclin A2: 49 kDa
PTM	Cyclin A1/A2: Polyubiquitinated via 'Lys-11'-linked ubiquitin by the anaphase-promoting complex (APC/C), leading to its degradation by the proteasome. Deubiquitinated and stabilized by USP37 enables entry into S phase. [UniProt]
Cellular Localization	Cyclin A1: Nucleus. [UniProt] Cyclin A2: Nucleus. Cytoplasm. Note=Exclusively nuclear during interphase (PubMed:1312467). Detected in the nucleus and the cytoplasm at prophase (PubMed:1312467). Cytoplasmic when associated with SCAPER (PubMed:17698606). [UniProt]

Images



ARG41929 anti-Cyclin A1 + Cyclin A2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human colon cancer tissue stained with ARG41929 anti-Cyclin A1 + Cyclin A2 antibody.



ARG41929 anti-Cyclin A1 + Cyclin A2 antibody WB image

Western blot: HeLa cell lysate stained with ARG41929 anti-Cyclin A1 + Cyclin A2 antibody.