

Product datasheet for **AM20282PU-S**

Cyclin A2 (CCNA2) Mouse Monoclonal Antibody [Clone ID: E67]

Product data:

Product Type:	Primary Antibodies
Clone Name:	E67
Applications:	FC, IF, IHC, IP, WB
Recommended Dilution:	ELISA: Use BSA free Antibody for coating. Flow Cytometry: 0.5-1 µg/million cells. Immunofluorescence: 1-2 µg/ml. Western Blotting: 0.5-1 µg/ml. Immunoprecipitation: 0.5-1 µg/500 µg protein lysate. Immunohistochemistry on Frozen and Formalin-fixed Sections: 1-2 µg/ml for 30 minutes at RT. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes. Positive Control: K-562 and HeLa Cells.
Reactivity:	Human, Mink, Monkey, Mouse
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Full length Bovine Cyclin A protein
Specificity:	It recognizes a protein of 54kDa, which is identified as cyclin A. Its epitope is located amino acids 144-148 of human Cyclin A2. Cyclins are regulatory subunits of the cyclin-dependent kinases (cdk's) and they control transition at different specific phases of the cell cycle. The temporal expression of cyclins is tightly regulated and subsequently plays a critical role in controlling the enzymatic activity of cdk's. These cyclin/cdk complexes are essential for passage through specific stages in the cell cycle. In mammalian somatic cells, cyclin A is required for S-phase and passage through G ₂ -phase. The D and E type cyclins regulate the passage of G ₁ , while cyclin B is a critical regulator of mitosis. Mutation or disruption of normal cyclin A expression causes cells to arrest in G ₂ -phase. Cellular Localization: Predominantly nuclear.



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Formulation:	10mM PBS State: Purified State: Liquid purified IgG fraction from Bioreactor Concentrate Stabilizer: 0.05% BSA Preservative: 0.05% Sodium Azide
Concentration:	lot specific
Purification:	Protein A/G Chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	54 kDa
Gene Name:	cyclin A2
Database Link:	Entrez Gene 890 Human P20248
Background:	Cyclin A is a 60 kDa cyclin that binds both cdk2 and p34cdc2 (cdk1), giving two distinct cyclin A kinase activities, one appearing in G1/S phase, the other in G2/M. The level of cyclin A protein peaks in S-phase, and the activity of the cdk2-cyclin A complexes is essential for DNA replication and progression through S phase. Cyclin A is thus a marker for actively proliferating cells and for cells in S-phase. In normal cells, cdk2-cyclin A complexes associate with PCNA and p21CIPP1/WAF1. In addition, cyclin A has been implicated in cell transformation and is found in complexes with E1A, transcription factors DRT F1 and E2F, and retinoblastoma protein, p110.
Synonyms:	Cyclin-A2, CCNA2, CCN1, CCNA, Cyclin A