

**Cyclin A2 (BF683) Mouse mAb**

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H	Endogenous	55	Mouse IgE	#P20248	890

**Product Usage Information****Application**

Western Blotting

**Dilution**

1:2000

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

Cyclin A2 (BF683) Mouse mAb detects endogenous levels of cyclin A2 and does not cross-react with other cyclins or Cyclin A1.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a recombinant human cyclin A2 protein.

**Background**

While overcoming the G1/S checkpoint to commence DNA replication requires cyclin E, and traversing the G2/M checkpoint to initiate mitosis requires cyclin B to be present, cyclin A seems to be required for both S-phase and M-phase (1). A number of studies have described the ability of overexpressed cyclin A to accelerate the G1 to S transition, causing DNA replication, and cyclin A antisense DNA can prevent DNA replication (2-4). Cyclin A availability is apparently the rate-limiting step for entry into mitosis, and cyclin A is required for the completion of prophase (5). At late prophase, cyclin A may no longer be necessary as cdc2/cyclinB1 becomes active (5).

**Background References**

1. Pagano, M. et al. (1992) *EMBO J.* 11, 961-71.
2. Resnitzky, D. et al. (1995) *Mol. Cell. Biol.* 15, 4347-52.
3. d'Urso, G. et al. (1990) *Science* 250, 786-91.
4. Zindy, F. et al. (1992) *Biochem. Biophys. Res. Commun.* 182, 1144-54.
5. Furuno, N. et al. (1999) *J. Cell. Biol.* 147, 295-306.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting

**Cross-Reactivity Key**

**H:** Human

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