

## Mouse Monoclonal Antibody to CDC2

Catalogue Number	sAP-0391
Target Molecule	<b>Name: CDC2</b> <b>Aliases:</b> CDC2; CDC28A; P34CDC2; MGC111195; DKFZp686L20222; CDK1 <b>MW: 34kDa</b> <b>Entrez Gene ID: 983</b>
Description	The cell division control protein cdc2, also known as cyclin-dependent kinase 1 (Cdk1) or p34/cdk1, plays a key role in the control of the eukaryotic cell cycle, where it is required for entry into S-phase and mitosis. Cdc2 exists as a complex with both cyclin A and cyclin B. The best characterized of these associations is the Cdc2 p34 cyclin B complex, which is required for the G2 to M phase transition. Activation of Cdc2 is controlled at several steps including cyclin binding and phosphorylation of threonine 161. However, the critical regulatory step in activating cdc2 during progression into mitosis appears to be dephosphorylation of Tyr15 and Tyr14. Phosphorylation at Tyr15 and inhibition of Cdc2 is carried out by WEE1 and MIK protein kinases while Tyr15 dephosphorylation and activation of Cdc2 is carried out by the cdc25 phosphatase.
Immunogen	Purified recombinant fragment of CDC2 expressed in E. Coli.
Reactive Species	Human
Clone	MM8C5A6;
Size and Concentration	100µg/1mg/ml
Supplied as	Lyophilized Powder from 100µl of Ascitic fluid containing 0.03% sodium azide.
Reconstitution/Storages	Reconstituted with 100µl sterile DI H <sub>2</sub> O, at stored at 4°C or -20°C for short or long term storage
Applications	ELISA: 1 to 10000; WB: 1 to 500 - 1 to 2000; IHC: 1 to 200 - 1 to 1000
Shipping	Regular FEDEX overnight shipment (ambient temperature)
Reference	1. Mol Biol Cell. 2008 Aug;19(8):3536-43. ; 2. Eur J Cancer. 2009 May;45(8):1466-73.

Optimal dilutions should be determined by each laboratory for each application. The listed dilutions are for recommendation only and the final conditions should be optimized by the ender users! This product is sold for **Research Use Only**