## CCNB1 Conjugated Antibody

Catalog No: #C32575



 Package Size:
 #C32575-AF350 100ul
 #C32575-AF405 100ul
 #C32575-AF488 100ul

 #C32575-AF555 100ul
 #C32575-AF594 100ul
 #C32575-AF647 100ul

 #C32575-AF680 100ul
 #C32575-AF750 100ul
 #C32575-Biotin 100ul

Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

## Description

Product Name	CCNB1 Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of total CCNB1 protein.
Immunogen Description	A synthetic peptide of human CCNB1.
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	CCNB1;CCNB;cyclinB1
Accession No.	Swiss-Prot#:P14635NCBI Gene ID:891
Uniprot	P14635
GeneID	891;
Excitation Emission	AF350: 346nm/442nm
	AF405: 401nm/421nm
	AF488: 493nm/519nm
	AF555: 555nm/565nm
	AF594: 591nm/614nm
	AF647: 651nm/667nm
	AF680: 679nm/702nm
	AF750: 749nm/775nm
Calculated MW	48
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

## **Application Details**

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250		
AF405 conjugated: most applications: 1: 50 - 1: 250		
AF488 conjugated: most applications: 1: 50 - 1: 250		
AF555 conjugated: most applications: 1: 50 - 1: 250		
AF594 conjugated: most applications: 1: 50 - 1: 250		
AF647 conjugated: most applications: 1: 50 - 1: 250		
AF680 conjugated: most applications: 1: 50 - 1: 250		
AF750 conjugated: most applications: 1: 50 - 1: 250		
Biotin conjugated: working with enzyme-conjugated str		

Antibodies were purified by affinity purification using immunogen.

## Background

Cyclins are a family of proteins that activate specific cyclin-dependent kinases required for progression through the cell cycle. The entry of all eukaryotic cells into mitosis is regulated by activation of cdc2/cdk1 at the G2/M transition. This activation is a multi-step process that begins with the binding of the regulatory subunit, cyclin B1, to cdc2/cdk1 to form the mitosis-promoting factor (MPF). MPF remains in the inactive state until phosphorylation of cdc2/cdk1 at Thr161 by cdk activating kinase (CAK) (1,2) and dephosphorylation of cdc2/cdk1 at Thr14/Tyr15 by cdc25C (3-5). Four cyclin B1 phosphorylation sites (Ser126, 128, 133, and 147) are located in the cytoplasmic retention signal (CRS) domain and are thought to regulate the translocation of cyclin B1 to the nucleus at the G2/M checkpoint, promoting nuclear accumulation and initiation of mitosis (6-9). While MPF itself can phosphorylate Ser126 and Ser128, polo-like kinase 1 (PLK1) phosphorylates cyclin B1 preferentially at Ser133 and possibly at Ser147 (6,10). At the end of mitosis, cyclin B1 is targeted for degradation by the anaphase-promoting complex (APC), allowing for cell cycle progression (11). Research studies have shown that cyclin B1 is overexpressed in breast, prostate, and non-small cell lung cancers (12-14).

Note: This product is for in vitro research use only