

## BUB1 Conjugated Antibody

Catalog No: #C32503



Package Size: #C32503-AF350 100ul #C32503-AF405 100ul #C32503-AF488 100ul  
 #C32503-AF555 100ul #C32503-AF594 100ul #C32503-AF647 100ul  
 #C32503-AF680 100ul #C32503-AF750 100ul #C32503-Biotin 100ul

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## Description

Product Name	BUB1 Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of total BUB1 protein.
Immunogen Description	Recombinant protein of human BUB1.
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	BUB1A;BUB1L;hBUB1
Accession No.	Swiss-Prot#:O43683NCBI Gene ID:699
Uniprot	O43683
GeneID	699;
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	122
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 streptavidin, most applications: 1: 50 - 1: 1,000

## Product Description

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Antibodies were purified by affinity purification using immunogen.

## Background

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The Mitotic Checkpoint Complex (MCC), which contains Bub1, Bub1b, Bub3, Mad2, and Cdc20, controls chromosome segregation and monitors kinetochore-microtubule interactions (1). During mitosis, the MCC complex inhibits the ubiquitin ligase activity of the Anaphase Promoting Complex/Cyclosome (APC/C), thereby preventing cells with unaligned chromosomes from prematurely entering anaphase (2). Research studies have shown that Bub1b and Bub1 kinases are mutated in several types of human malignancies including hematopoietic, colorectal, lung, and breast cancers (3). Biallelic mutations in Bub1b have been found in mosaic variegated aneuploidy syndrome and premature chromatid separation syndrome (4). Bub1b mouse germline knockouts are embryonic lethal with heterozygous animals displaying genetic instability, early aging phenotypes, and increased cancer susceptibility (5). Bub3 binds both Bub1 and Bub1b, facilitating their recruitment to kinetochores (6), and is required for functional microtubule-kinetochore interactions (7).

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Note: This product is for in vitro research use only