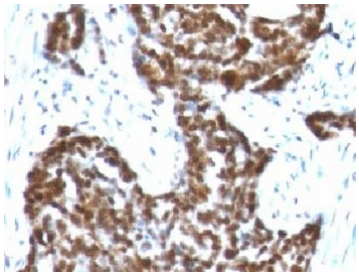
Cyclin B1 Antibody [clone BCLB1-1] (V7161)

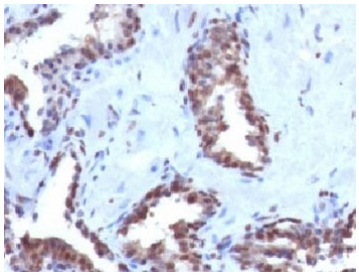
Catalog No.	Formulation	Size
V7161-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7161-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7161SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7161IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

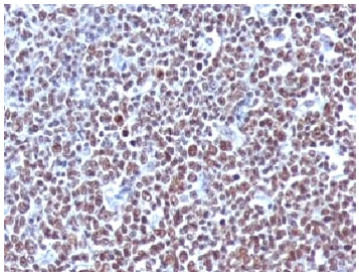
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	BCLB1-1
Purity	Protein G affinity chromatography
UniProt	P14635
Localization	Cytoplasmic & nuclear
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT (1) Prediluted IHC Only Format : incubate for 30 min at RT (2)
Limitations	This Cyclin B1 antibody is available for research use only.



IHC testing of FFPE human ovarian carcinoma with Cyclin B1 antibody (clone BCLB1-1).



IHC testing of FFPE human prostate carcinoma with Cyclin B1 antibody (clone BCLB1-1).



IHC testing of FFPE human tonsil with Cyclin B1 antibody (clone BCLB1-1).

Description

Cyclin B1 (CCNB1) is a regulatory protein involved in mitosis. The gene product complexes with p34 (Cdk1) to form the maturation-promoting factor (MPF). Cyclin B1 contributes to the switch-like all or none behavior of the cell in deciding to commit to mitosis. Its activation is well-regulated, and positive feedback loops ensure that once the CCNB1-Cdk1 complex is activated, it is not deactivated. CCNB1-Cdk1 is involved in the early events of mitosis, such as chromosome condensation, nuclear envelope breakdown, and spindle pole assembly. Once activated, CCNB1-Cdk1 promotes several of the events of early mitosis. The active complex phosphorylates and activates 13S condensin, which helps to condense chromosomes. Another important function of the complex is to break down the nuclear envelope. The nuclear envelope is a membranous structure containing large protein complexes supported by a network of nuclear lamins. Phosphorylation of the lamins by CCBN1-Cdk1 causes them to dissociate, compromising the structural integrity of the nuclear envelope so that it breaks down. The destruction of the nuclear envelope is important because it allows the mitotic spindle to access the chromosomes. [Wiki]

Application Notes

Titering of the Cyclin B1 antibody may be required for optimal performance.

1. FFPE testing requires sections to be boiled in pH6 10mM citrate buffer for 10-20 minutes, followed by cooling at RT for 20 minutes, prior to staining.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant human full-length protein was used as the immunogen for the Cyclin B1 antibody.

Storage

Store the Cyclin B1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).