

**Claspin Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV10589****Specification**

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**Claspin Antibody - Product Information**

Application	<b>WB, IP</b>
Primary Accession	<a href="#">O9HAW4</a>
Other Accession	<a href="#">AAG24515</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Calculated MW	<b>151094</b>

**Claspin Antibody - Additional Information****Gene ID** 63967**Application & Usage****Western blotting (1:500 - 1:2000) and Immunoprecipitation. HeLa cell extract can be used as a positive control. However, the optimal concentrations should be determined individually. The antibody recognizes the Claspin of human origin. Reactivity to other species has not been tested.****Other Names**

Clspn

**Target/Specificity**

Claspin

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

100 µl affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 1% BSA and 0.02% thimerosal.

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

**Background Descriptions**

## Precautions

Claspin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Claspin Antibody - Protein Information

**Name** CLSPN ([HGNC:19715](#))

### Function

Required for checkpoint mediated cell cycle arrest in response to inhibition of DNA replication or to DNA damage induced by both ionizing and UV irradiation (PubMed:[12766152](http://www.uniprot.org/citations/12766152), PubMed:[15190204](http://www.uniprot.org/citations/15190204), PubMed:[15707391](http://www.uniprot.org/citations/15707391), PubMed:[16123041](http://www.uniprot.org/citations/16123041)). Adapter protein which binds to BRCA1 and the checkpoint kinase CHEK1 and facilitates the ATR-dependent phosphorylation of both proteins (PubMed:[12766152](http://www.uniprot.org/citations/12766152), PubMed:[15707391](http://www.uniprot.org/citations/15707391), PubMed:[15096610](http://www.uniprot.org/citations/15096610), PubMed:[16123041](http://www.uniprot.org/citations/16123041)). Also required to maintain normal rates of replication fork progression during unperturbed DNA replication. Binds directly to DNA, with particular affinity for branched or forked molecules and interacts with multiple protein components of the replisome such as the MCM2-7 complex and TIMELESS (PubMed:[15226314](http://www.uniprot.org/citations/15226314), PubMed:[35585232](http://www.uniprot.org/citations/35585232), PubMed:[34694004](http://www.uniprot.org/citations/34694004)). Important for initiation of DNA replication, recruits kinase CDC7 to phosphorylate MCM2-7 components (PubMed:[27401717](http://www.uniprot.org/citations/27401717)).

### Cellular Location

Nucleus.

## Claspin Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Claspin Antibody - Images

## Claspin Antibody - Background

Claspin is a checkpoint protein that interacts with and regulates checkpoint kinase 1 (Chk1) in response to replication stress. The interaction between claspin and Chk1 has been demonstrated to be required for ATR-dependent Chk1 activation. The interaction involves the phosphorylation of

claspin that may be accomplished by Chk1 kinase activity. Claspin has been found to localize to chromatin in both the presence and absence of damaged DNA and to associate with PCNA, as an essential component of the DNA replication machinery. This association with the replication machinery may indicate a role for claspin in linking replication to DNA damage signaling and Chk1 activation.