# abcam

### Product datasheet

# Anti-Claspin antibody ab3720

★★★★★ 5 Abreviews 16 References 1 Image

#### Overview

**Product name** Anti-Claspin antibody

**Description** Rabbit polyclonal to Claspin

**Host species** Rabbit

**Tested applications** Suitable for: IHC-P Species reactivity Reacts with: Human

Predicted to work with: Chimpanzee, Gorilla, Orangutan

**Immunogen** Synthetic peptide (Human) - which represented a portion of human Claspin encoded in part by

exons 11, 12 and 13.

**General notes** The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

> Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

**Form** Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 7

Preservative: 0.1% Sodium azide

Constituents: 0.021% PBS, 1.764% Sodium citrate, 1.815% Tris

**Purity** Immunogen affinity purified

Clonality Polyclonal

Isotype ΙgG

**Applications** 

The Abpromise guarantee Our Abpromise guarantee covers the use of ab3720 in the following tested applications.

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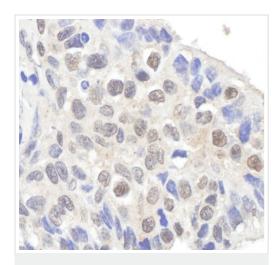
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/500 - 1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

## **Target**

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. Adapter protein which binds to BRCA1 and the checkpoint kinase CHEK1 and facilitates the ATR-dependent phosphorylation of both proteins. Can also bind specifically to branched DNA structures and may associate with S-phase chromatin following formation of the pre-replication complex (pre-RC). This may indicate a role for this protein as a sensor which monitors the integrity of DNA replication forks.	
Sequence similarities	Belongs to the claspin family.	
Domain	The C-terminus of the protein contains 3 potential CHEK1-binding motifs (CKB motifs). Potential phosphorylation sites within CKB motif 1 and CKB motif 2 are required for interaction with CHEK1.	
Post-translational modifications	Phosphorylated. Undergoes ATR-dependent phosphorylation by CHEK1 during activation of DNA replication or damage checkpoints. Phosphorylation by CSNK1G1/CK1 promotes CHEK1 binding.  Ubiquitinated by the anaphase promoting complex/cyclosome (APC/C) during G1 phase, leading to its degradation by the proteasome. Ubiquitination is mediated via its interaction with FZR1/CDH1. Following DNA damage, it is deubiquitinated by USP28 in G2 phase, preventing its degradation.	
Cellular localization	Nucleus.	

#### **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Claspin antibody (ab3720)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human lung carcinoma tissue labelling Claspin with ab3720 at 1/1000 (1 $\mu$ g/ml). Detection: DAB.

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