abcam

Product datasheet

Anti-PSTAIR antibody [PSTAIR] ab10345

1 Abreviews 16 References 2 Images

Overview

Product name	Anti-PSTAIR antibody [PSTAIR]
Description	Mouse monoclonal [PSTAIR] to PSTAIR
Host species	Mouse
Tested applications	**Suitable for:** ELISA, IP, WB, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Cow, Human, Pig, Saccharomyces cerevisiae, Xenopus laevis, Monkey, Plants, Quail **Predicted to work with:** Fish, a wide range of other species
Immunogen	Synthetic peptide: EGVPSTAIREISLLKE conjugated to BSA, corresponding to amino acids 42-57 of Human PSTAIR. Run BLAST with Run BLAST with
Epitope	Recognizes an epitope present in the PSTAIR sequence 1 of $p34^{cdc2}$ (cdk1) and of other cyclin-dependent kinases containing the PSTAIR motif (cdk2 and cdk3).
General notes	**Abcam is committed to meeting high quality standards of ethical manufacturing and has decided to discontinue this product by June 2020 as it has been generated by the ascites method. We are sorry for any inconvenience this may cause. We suggest ab32094 as a possible replacement.**

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Preservative: 0.097% Sodium azide Constituent: Ascites
Purity	Ascites
Clonality	Monoclonal
Clone number	PSTAIR
Isotype	IgG1

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab10345 in the following tested applications.

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

Application	Abreviews	Notes
ELISA		
IP		
WB	★★★★★ (1)	
ICC/IF		

Application notes

ELISA: Use at an assay dependent dilution.
ICC/IF: Use at an assay dependent dilution (PMID 19187565).
IP: Use at an assay dependent dilution. It cannot precipitate $p34^{cdc2}$ when it is complexed with cyclin B.
WB: 1/4000 (determined by indirect blotting using COS-7 cell extract). The antibody recognises 31-34kD proteins (1-4) bands.

Monoclonal Anti-PSTAIR may be used for the localization of cyclin-dependent kinases, containing the PSTAIR motif.

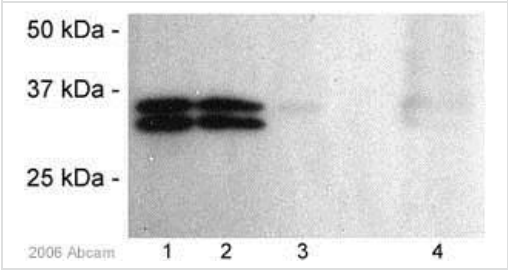
Not tested in other applications.
Optimal dilutions/concentrations should be determined by the end user.

Target

Relevance

The cell cycle is controlled in part by cyclin dependent kinases (CDKs) which are themselves controlled by modifications such as phosphorylation of CDKs and formation of complex(es) with other proteins, including the cyclins. CDKs are key regulators of cell cycle progression. CDKs are closely related in size (35-40 kD) and sequence (>40% identity) and associate with and are activated by a cyclin which acts as a regulatory subunit. In every eukaryote examined, CDKs contain an evolutionary conserved 16 amino acid sequence called PSTAIR (EGVPSTAIREISLLKE) which distinguishes them from other protein kinases. The PSTAIR motif is involved in the complex formation with cyclins. The availability of antibodies reacting specifically with the PSTAIR sequence enables the subcellular detection and localization of the various CDKs and examination of substrate interactions, in a variety of organisms.

Images



Western blot - Anti-PSTAIR antibody [PSTAIR] (ab10345)

All lanes : Anti-PSTAIR antibody [PSTAIR] (ab10345) at 1/6000 dilution

Lane 1 : Whole cell lysate from wild-type S. cerevisiae yeast cells
Lane 2 : Supernatant after incubation with Protein A-Sepharose beads
Lane 3 : Eluate from Protein A-Sepharose beads after treatment with TEV protease
Lane 4 : Product of boiling Protein A-Sepharose after TEV treatment

Secondary
All lanes : Goat anti-mouse HRP conjugate

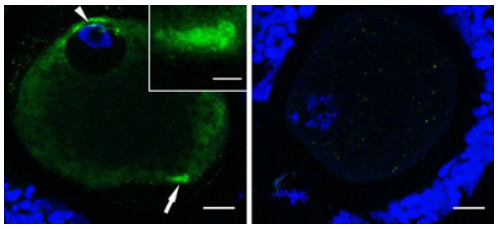
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 31 kDa
Observed band size: 32,34 kDa

Exposure time: 1 minute

This image is courtesy of an Abreview submitted by **Mark Chee** on **27 January 2006**.



Immunocytochemistry/ Immunofluorescence - Anti-PSTAIR antibody [PSTAIR] (ab10345)

Image from Holzenspies J. et.al., BMC Dev Biol. 2009; 9: 8. (Fig. 1C).

ab10345 staining PSTAIR in Porcine Ooocytes by Immunocytochemistry/ Immunofluorescence. Oocytes were partially denuded by gentle pipettting in PEM-PVPc (80 mM PIPES, 5mM EGTA. 2 mM MgCl2, pH 6.8, supplemented with 0.3% (w/v) PVP) supplemented with either 0.01% (w/v) pronase (for < 22 h cultured oocytes), or 0.1% (w/v) hyaluronidase (for ≥ 22 h cultured oocytes). After washing in PEM-PVP at 37°C, oocytes were fixed in freshly prepared PEM-PVP containing 4% (v/v) paraformaldehyde at room temperature (RT) for 1 h. An Alexa Fluor® 488 conjugated Goat anti mouse IgG was used as secondary. ab10345 show green PSTAIR staining and DNA was stained blue. Arrow indicate the area that is shown enlarged in the inset. Left image show stainming with ab10345 and right one show staining with mouse IgG as negative control.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors