abcam

Product datasheet

Anti-CDKN2A/p16INK4a antibody [2D9A12] ab54210

19 Abreviews 124 References 8 Images

Overview

Product name	Anti-CDKN2A/p16INK4a antibody [2D9A12]
Description	Mouse monoclonal [2D9A12] to CDKN2A/p16INK4a
Host species	Mouse
Tested applications	**Suitable for:** Flow Cyt, IHC-P **Unsuitable for:** WB
Species reactivity	**Reacts with:** Rat, Human
Immunogen	Recombinant fragment corresponding to Human CDKN2A/p16INK4a. Database link: **P42771**
Positive control	IHC-P: Human brain tumor, ovarian carcinoma, cervix, skin and brain tissue. Rat liver tissue. Flow Cyt: HeLa cells.
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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.03% Sodium azide Constituent: PBS
Purity	Protein G purified
Purification notes	Purified from tissue culture supernatant.
Clonality	Monoclonal
Clone number	2D9A12
Isotype	IgG2b

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab54210 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
Flow Cyt		1/50. **ab170192** - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.
IHC-P	★★★★★ **(9)**	1/200 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Recommended antigen retrieval:Place slides in a special glass slide holder and fill in the rack with slides to ensure even heating.Rinse rack in 1L of Citrate buffer in ordinary pressure cooker,(0.01M,pH6.0) to immerse all slides.Cover the cap and heat for 15-20 minutes on electric cooker until water boils.Begin

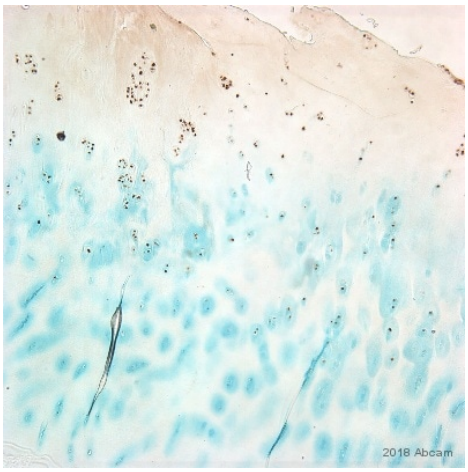
Application notes Is unsuitable for WB.

Target

Cellular localization Cytoplasmic and Nuclear

Form There are 4 isoforms produced by alternative splicing. Isoform 1 also known as: p16INK4a; Isoform 3 also known as: p12; Isoform 4 also known as: p14ARF; p19ARF; ARF.

Images

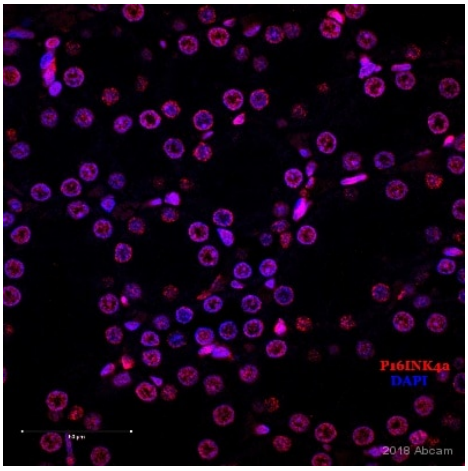


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDKN2A/p16INK4a antibody [2D9A12] (ab54210)

Image is courtesy of an anonymous abreview by a verified customer

Zinc buffered formalin-fixed human cartilage tissue stained for CDKN2A/p16INK4a using ab54210 at a 1/200 dilution for 15 hours at 4°C. A Goat-anti-mouse polyclonal-biotin was used at the secondary at a 1/200 dilution.

For further detail please see **abreview**.

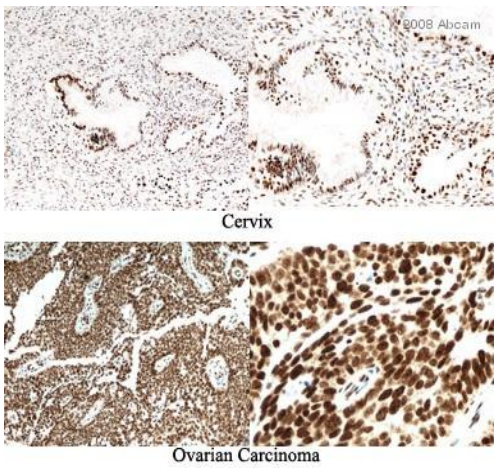


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDKN2A/p16INK4a antibody [2D9A12] (ab54210)

Image is courtesy of an anonymous abreview by a verified customer

10% formalin-fixed rat kidney tissue stained for CDKN2A/p16INK4a using ab54210 at a 1/500 dilution for 16 hours at 4°C. A Cy3-conjugated donkey-anti-mouse was used at the secondary at a 1/200 dilution.

For further detail please see **abreview**.

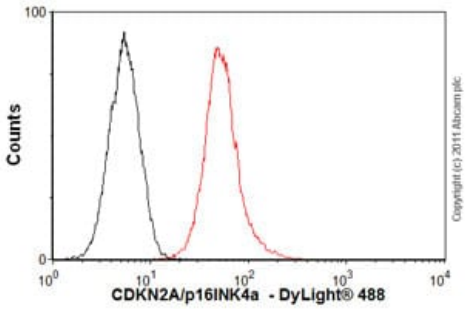


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDKN2A/p16INK4a antibody [2D9A12] (ab54210)

Image is courtesy of an anonymous AbReview

ab54210 staining CDKN2A/p16INK4a in human cervix and ovarian carcinoma tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections).

Tissue was fixed with formaldehyde and antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/4000) for 20 minutes at 25°C. An undiluted HRP-conjugated mouse polymer was used as the secondary antibody.



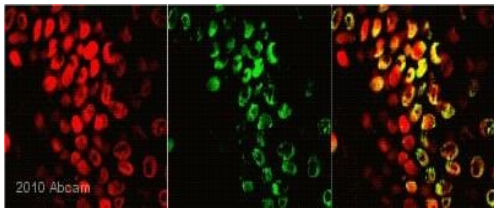
Flow Cytometry - Anti-CDKN2A/p16INK4a antibody [2D9A12] (ab54210)

Overlay histogram showing HeLa (Human epithelial cell line from cervix adenocarcinoma) cells stained with ab54210 (red line).

The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab54210, 1/50 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2b [PLPV219] (**ab91366**, 2µg/1x10^6 cells) used under the same conditions.

Acquisition of >5,000 events was performed.

This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde/permeabilized in 0.1% PBS-Tween used under the same conditions.

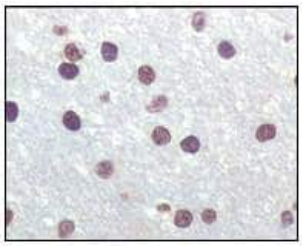


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDKN2A/p16INK4a antibody [2D9A12] (ab54210)

Image courtesy of an anonymous AbReview

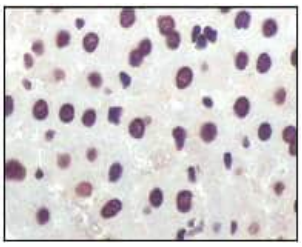
ab54210 staining CDKN2A/p16INK4a in human skin tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections).

Tissue was fixed with formaldehyde and blocked with 2% BSA for 1 hour at 22°C; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/100 in 1% NGS/TBS) for 20 hours at 4°C. **ab6785** (1/800) was used as the secondary antibody.



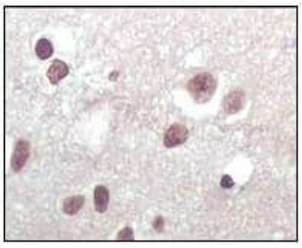
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDKN2A/p16INK4a antibody [2D9A12] (ab54210)

ab54210 at a 1:500 staining CDKN2A/p16INK4a in human brain tumor tissue by immunohistochemistry using paraffin embedded tissue. Nuclear staining (DAB) is shown.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDKN2A/p16INK4a antibody [2D9A12] (ab54210)

ab54210 at a 1:500 staining CDKN2A/p16INK4a in rat liver tissue by immunohistochemistry using paraffin embedded tissue. Nuclear staining (DAB staining) is shown.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDKN2A/p16INK4a antibody [2D9A12] (ab54210)

ab54210 at a 1:500 staining CDKN2A/p16INK4a in human brain tissue by immunohistochemistry using paraffin embedded tissue. Nuclear staining (DAB staining) is shown.

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