# abcam

### Product datasheet

## Anti-FOXC1 antibody ab226219

1 References 3 Images

Overview

Product name Anti-FOXC1 antibody

**Description** Rabbit polyclonal to FOXC1

Host species Rabbit

**Tested applications** Suitable for: WB, IP, IHC-P

Species reactivity Reacts with: Human

**Immunogen** Synthetic peptide within Human FOXC1 aa 375-425. The exact sequence is proprietary.

(NP 001444.2).

Database link: Q12948

Positive control WB: HeLa, HEK-293T and Jurkat whole cell lysate (ab7899). IP: HeLa whole cell lysate

(ab150035). IHC-P: Human breast carcinoma tissue.

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** pH: 6.8

Preservative: 0.09% Sodium azide

Constituents: 0.1% BSA, Tris buffered saline

Purity Immunogen affinity purified

Purification notes ab226219 was affinity purified using an epitope specific to FOXC1 immobilized on solid support.

**Clonality** Polyclonal

**Isotype** IgG

1

#### **Applications**

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab226219 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
WB		1/2000 - 1/10000. Predicted molecular weight: 57 kDa.
IP		Use at 2-10 μg/mg of lysate.
IHC-P		1/100 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

#### **Target**

**Function** 

Binding of FREAC-3 and FREAC-4 to their cognate sites results in bending of the DNA at an angle of 80-90 degrees.

**Tissue specificity** 

Expressed in all tissues and cell lines examined.

Involvement in disease

Defects in FOXC1 are the cause of Axenfeld-Rieger syndrome type 3 (RIEG3) [MIM:602482]; also known as Axenfeld-Rieger syndrome (ARS) or Axenfeld syndrome or Axenfeld anomaly. It is characterized by posterior corneal embryotoxon, prominent Schwalbe line and iris adhesion to the Schwalbe line. Other features may be hypertelorism (wide spacing of the eyes), hypoplasia of the malar bones, congenital absence of some teeth and mental retardation. When associated with tooth anomalies, the disorder is known as Rieger syndrome. Glaucoma is a progressive blinding condition that occurs in approximately half of patients with Axenfeld-Rieger malformations. Defects in FOXC1 are the cause of iridogoniodysgenesis anomaly (IGDA) [MIM:601631]. IGDA is an autosomal dominant phenotype characterized by iris hypoplasia, goniodysgenesis, and juvenile glaucoma.

Defects in FOXC1 are a cause of Peters anomaly (PAN) [MIM:604229]. Peters anomaly consists of a central corneal leukoma, absence of the posterior corneal stroma and Descemet membrane, and a variable degree of iris and lenticular attachments to the central aspect of the posterior cornea.

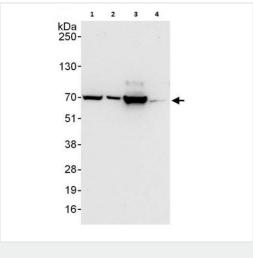
Sequence similarities

Contains 1 fork-head DNA-binding domain.

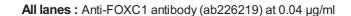
**Cellular localization** 

Nucleus.

#### **Images**



Western blot - Anti-FOXC1 antibody (ab226219)



**Lane 1 :** HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 50 μg

Lane 2: HeLa whole cell lysate at 15 µg

**Lane 3 :** HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate at 50  $\mu g$ 

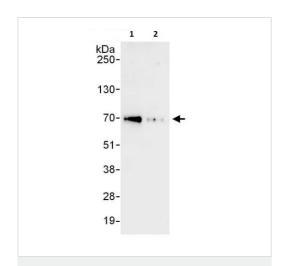
Lane 4 : Jurkat (human T cell leukemia cell line from peripheral

blood) whole cell lysate at 50 µg

Developed using the ECL technique.

Predicted band size: 57 kDa

Exposure time: 10 seconds



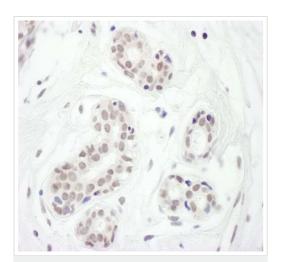
Immunoprecipitation - Anti-FOXC1 antibody (ab226219)

FOXC1 was immunoprecipitated from HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate (1 mg for IP, 20% of IP loaded) with ab226219 at 6  $\mu$ g/mg lysate. Western blot was performed from the immunoprecipitate using ab226219 at 1  $\mu$ g/ml.

Lane 1: ab226219 IP in HeLa whole cell lysate.

Lane 2: Control IgG IP in HeLa whole cell lysate.

Detection: Chemiluminescence with exposure time of 10 seconds.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FOXC1 antibody (ab226219)

Formalin-fixed, paraffin-embedded human breast carcinoma tissue stained for FOXc1 using ab226219 at 1/200 dilution in immunohistochemical analysis.

Detection: DAB staining. Counterstain: Hematoxylin (blue).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### 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 <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

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