


Anti-Sall4 antibody ab29112

★★★★☆ [16 Abreviews](#) [70 References](#) [10 Images](#)

Overview

Product name	Anti-Sall4 antibody
Description	Rabbit polyclonal to Sall4
Host species	Rabbit
Specificity	Replenishment batches of our polyclonal antibody, ab29112 are tested in WB and ICC. Previous batches were additionally validated in IHC-P. This application is still expected to work and is covered by our Abpromise guarantee. You may also be interested in our alternative recombinant antibody, ab226756 .
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Chicken, Xenopus laevis, Monkey, Macaque monkey, Common marmoset 
Immunogen	Synthetic peptide conjugated to KLH derived from within residues 1000 to the C-terminus of Mouse Sall4. Read Abcam's proprietary immunogen policy
Positive control	IHC-P: FFPE human testis seminoma tissue sections
General notes	<p>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.</p> <p>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</p>

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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

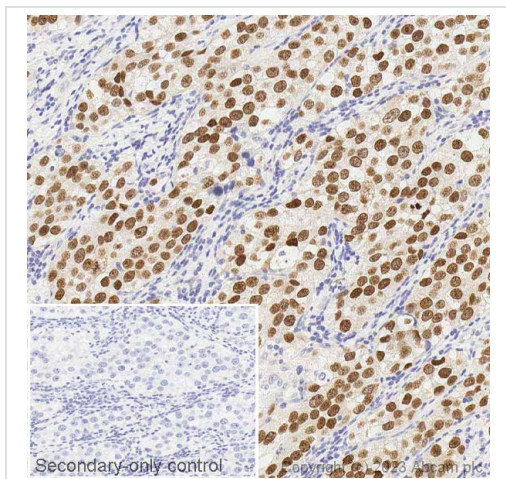
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab29112 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (4)	Use a concentration of 1 µg/ml. Detects a band of approximately 85, 140 kDa (predicted molecular weight: 66, 113 kDa).
IHC-P	★★★★★ (6)	Use a concentration of 0.5 - 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF	★★★★★ (4)	Use a concentration of 1 µg/ml.

Target

Function	Probable transcription factor.
Tissue specificity	Expressed in testis.
Involvement in disease	<p>Defects in SALL4 are the cause of Duane-radial ray syndrome (DRRS) [MIM:607323]; also known as Okihiro syndrome. DRRS is a disorder characterized by the association of forearm malformations with Duane retraction syndrome.</p> <p>Defects in SALL4 are the cause of oculotoradial syndrome (OORS) [MIM:147750]. Oculotoradial syndrome is an autosomal dominant condition characterized by upper limbs anomalies (radial ray defects, carpal bones fusion), extraocular motor disturbances, congenital bilateral non-progressive mixed hearing loss. Other less consistent malformations include heart involvement, mild thrombocytopenia and leukocytosis (before age 50), shoulder girdle hypoplasia, imperforate anus, kidney malrotation or rectovaginal fistula. The MIC syndrome is an allelic disorder of Duane-radial ray syndrome (DRRS) with a similar phenotype.</p>
Sequence similarities	<p>Belongs to the sal C2H2-type zinc-finger protein family.</p> <p>Contains 7 C2H2-type zinc fingers.</p>
Cellular localization	Nucleus.

Images

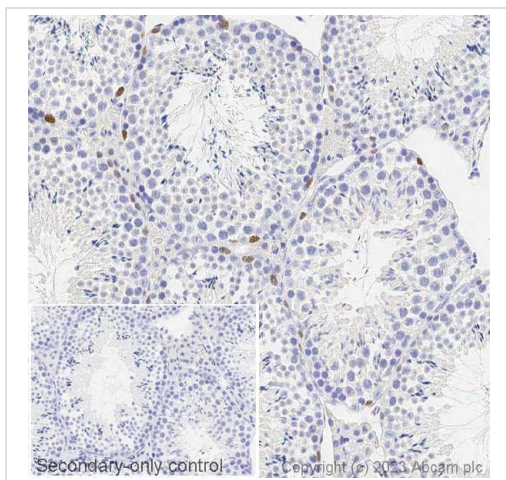


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Sall4 antibody (ab29112)

IHC image of Sall4 staining in a section of formalin-fixed paraffin-embedded human testis seminoma* performed on a Leica Biosystems BOND® RX instrument using the standard protocol. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab29112, 0.5ug/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

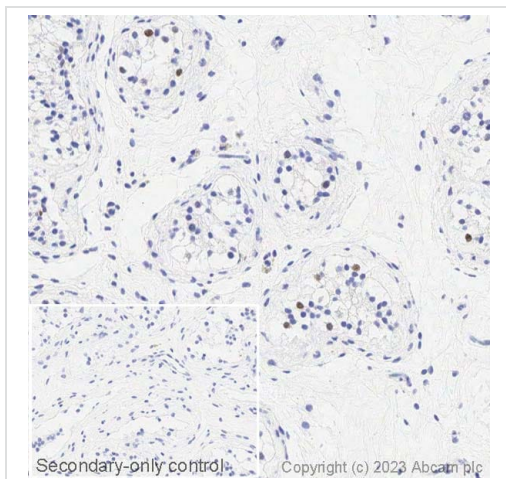
*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Sall4 antibody (ab29112)

IHC image of Sall4 staining in a section of formalin-fixed paraffin-embedded mouse normal testis performed on a Leica Biosystems BOND® RX instrument using the standard protocol. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab29112, 0.5ug/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

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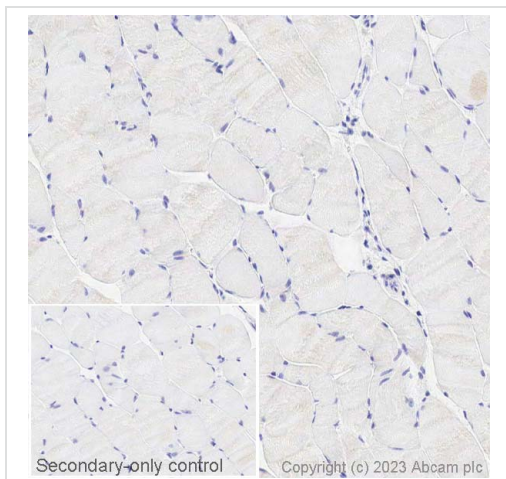


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Sall4 antibody (ab29112)

IHC image of Sall4 staining in a section of formalin-fixed paraffin-embedded human normal testis* performed on a Leica Biosystems BOND® RX instrument using the standard protocol. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab29112, 0.5ug/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

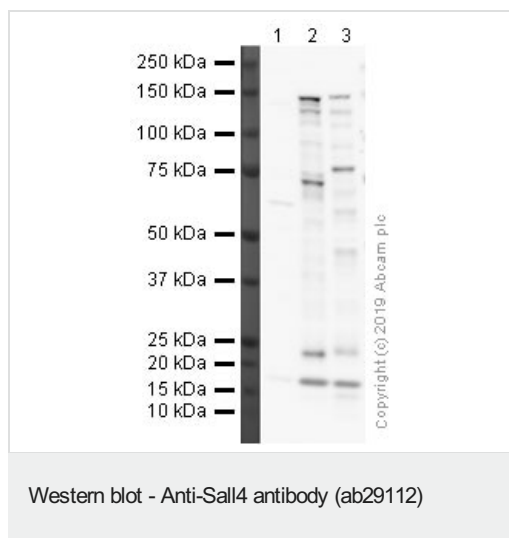
*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Sall4 antibody (ab29112)

Negative control image: IHC image of Sall4 staining in a section of formalin-fixed paraffin-embedded mouse normal skeletal muscle performed on a Leica BOND™ system using the standard protocol. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab29112, 0.5ug/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



All lanes : Anti-Sall4 antibody (ab29112) at 1 µg/ml

Lane 1 : MEF1 whole cell lysate

Lane 2 : Mouse embryonic stem cell lysate

Lane 3 : HuES7 whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/50000 dilution

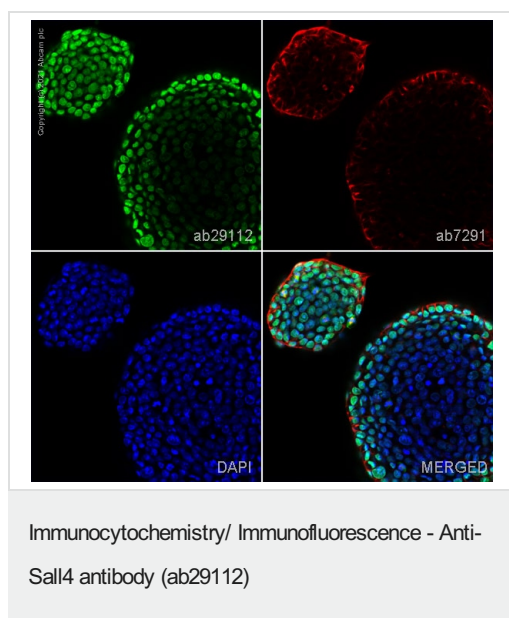
Predicted band size: 66, 113 kDa

Observed band size: 140 kDa

Exposure time: 12 minutes

Gel type: MOPS

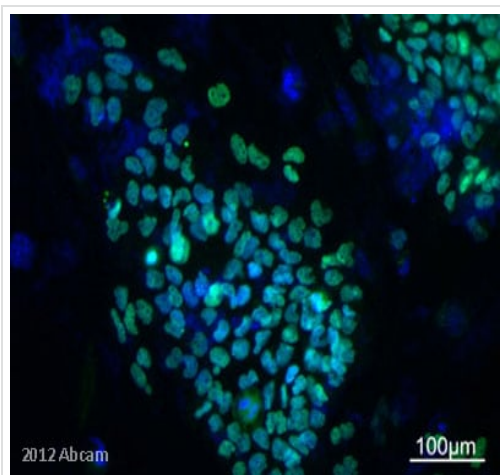
Blocking buffer: 1% milk block



ab29112 staining SALL4 in mES cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Tween for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab29112 at 1µg/ml and **ab7291**, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with **ab150081**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and **ab150120**, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

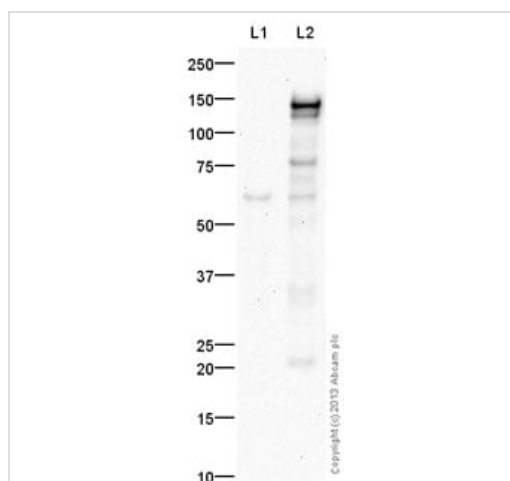
Also suitable in cells fixed with 4% paraformaldehyde (10 min).

Image was acquired with a confocal microscope (Leica-Microsystems TCS SP8) and a single confocal section is shown.



Immunocytochemistry/ Immunofluorescence - Anti-Sall4 antibody (ab29112)

This image is courtesy of an anonymous abreview.



Western blot - Anti-Sall4 antibody (ab29112)

ICC/IF image of ab29112 stained human embryonic stem cells. The cells were fixed in Paraformaldehyde, permeabilized using 0.1% Triton X-100, blocked with 10% Goat serum, 0.1% BSA in PBS for 1 hour at RT, before incubation with ab29112 at a 1/100 dilution for 12 hours at 4°C. The secondary used was an Alexa Fluor® 488 conjugated goat anti-rabbit polyclonal, at 1/200 dilution.

All lanes : Anti-Sall4 antibody (ab29112) at 1 µg/ml

Lane 1 : MEF1 (Mouse embryonic fibroblast cell line) Whole Cell Lysate

Lane 2 : E14Tg2a (Mouse embryonic stem cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 66, 113 kDa

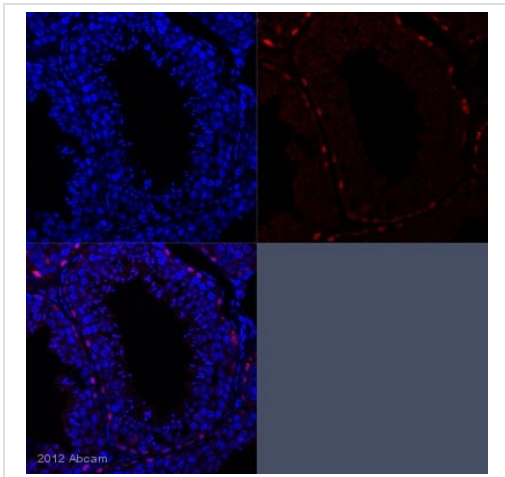
Observed band size: 140,80 kDa

Additional bands at: 60 kDa (possible non-specific binding)

Exposure time: 8 minutes

MEF1 whole cell lysate was included as a negative control.

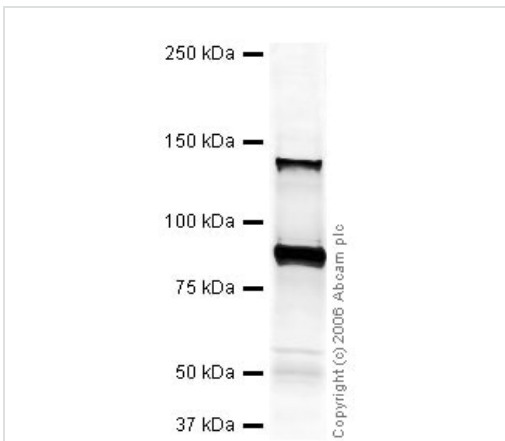
Secondary antibody - goat **anti-rabbit HRP (ab97051)**



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Sall4 antibody (ab29112)

This image is courtesy of an abreview by Zachary Yu-Ching Lin.

IHC-P image of Sall4 staining with ab29112 on tissue sections from a 3 year old adult marmoset testis. The sections were subjected to heat-mediated antigen retrieval using Dako antigen retrieval solution. The sections were then blocked with 5% milk for 30 minutes at 25°C, before incubation with ab29112 (1/100 dilution) for 20 hours at 4°C. The secondary was an Alexa Fluor® 555 conjugated goat anti-rabbit polyclonal, used at a 1/500 dilution.



Western blot - Anti-Sall4 antibody (ab29112)

Anti-Sall4 antibody (ab29112) at 1 µg + E14tG2a (Mouse embryonic stem cell line) Whole Cell Lysate at 20 µg

Secondary

IR Dye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/15000 dilution

Performed under reducing conditions.

Predicted band size: 66, 113 kDa

Observed band size: 140,85 kDa

This antibody detects two bands which we believe correspond to the two isoforms of Sall4 outlined in Ma *et al*, 2006 (PMID: 16763212). This paper describes human isoforms running at 165 kDa and 95 kDa. In mouse embryonic stem cells we see both isoforms running at slightly lower molecular weights. We believe that these bands represent Sall4a (Swissprot: Q8BX22) and Sall4b (Swissprot: Q6S7E9) which are predicted to be 113 kDa and 66 kDa respectively.

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