


Product datasheet

Anti-FOXG1 antibody ab18259

★★★★☆ [12 Abreviews](#) [126 References](#) [4 Images](#)

Overview

Product name	Anti-FOXG1 antibody
Description	Rabbit polyclonal to FOXG1
Host species	Rabbit
Specificity	Replenishment batches of our polyclonal antibody, ab18259 are tested in IHC-P. Previous batches were additionally validated in WB. This application is still expected to work and is covered by our Abpromise guarantee. You may also be interested in our alternative recombinant antibody, ab196868 .
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human Predicted to work with: Xenopus laevis 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
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

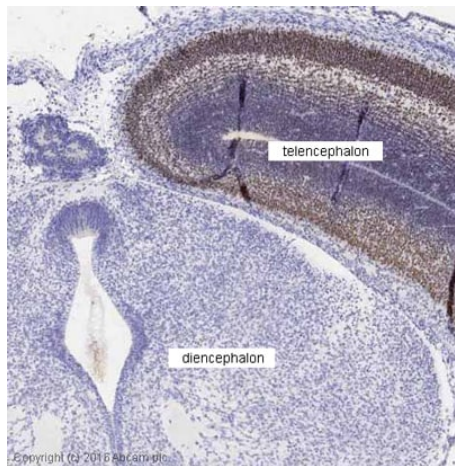
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab18259 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (2)	Use a concentration of 1 µg/ml. Detects a band of approximately 50 kDa (predicted molecular weight: 50 kDa).
IHC-P	★★★★★ (2)	Use a concentration of 0.5 - 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function	Transcription repression factor which plays an important role in the establishment of the regional subdivision of the developing brain and in the development of the telencephalon.
Tissue specificity	Expression is restricted to the neurons of the developing telencephalon.
Involvement in disease	Defects in FOXP1 are the cause of congenital variant of Rett syndrome (RTTCV) [MIM:613454]. RTTCV is a severe neurodevelopmental disorder with features of classic Rett syndrome but earlier onset in the first months of life. Clinical features include progressive microcephaly, hypotonia, irresponsiveness and irritability in the neonatal period, mental retardation, psychomotor regression and stereotypical movements.
Sequence similarities	Contains 1 fork-head DNA-binding domain.
Cellular localization	Nucleus.

Images

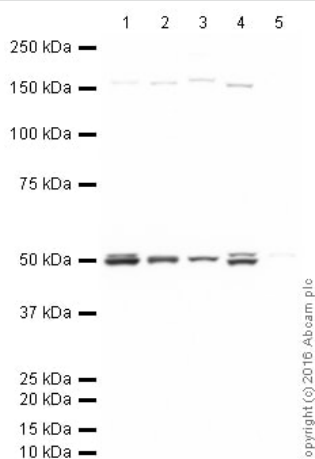


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXG1 antibody - ChIP Grade (ab18259)

IHC image of FoxG1 staining in mouse brain E14 formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol B. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab18259, 0.5 µg/ml, for 15 mins at room temperature. A goat anti-rabbit biotinylated secondary antibody was used to detect the primary, and visualized using an HRP conjugated ABC system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Staining revealed in telencephalon (but not diencephalon) as expected.

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.



Western blot - Anti-FOXG1 antibody - ChIP Grade (ab18259)

All lanes : Anti-FOXG1 antibody (ab18259) at 1 µg/ml

Lane 1 : Human brain tissue lysate - total protein (**ab29466**)

Lane 2 : Brain (Mouse) Tissue Lysate

Lane 3 : E10 Mouse Embryo Brain Tissue Lysate

Lane 4 : Brain (Rat) Tissue Lysate

Lane 5 : Human spleen tissue lysate - total protein (negative control)

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/50000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

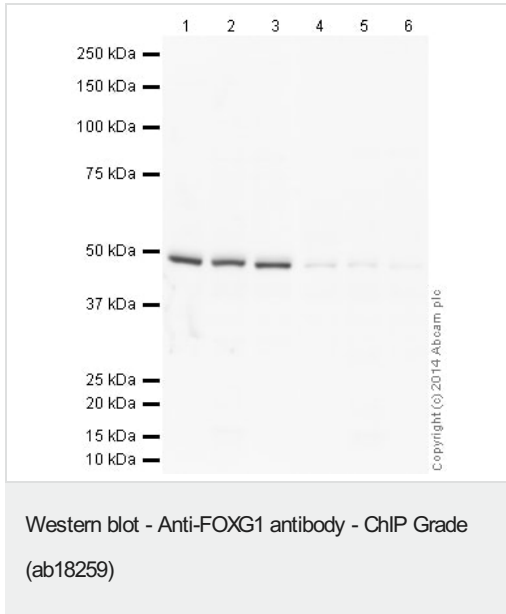
Predicted band size: 50 kDa

Observed band size: 50 kDa

Additional bands at: 155 kDa, 52 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 3 minutes

This blot was produced using a 4-12% Bis-tris gel under the MES buffer system. The gel was run at 200V for 35 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% Milk before being incubated with ab18259 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution **ab133406**.



All lanes : Anti-FOXG1 antibody (ab18259) at 1 µg/ml

Lane 1 : Human brain tissue lysate - total protein (**ab29466**)

Lane 2 : Brain (Mouse) Tissue Lysate

Lane 3 : Brain (Rat) Tissue Lysate

Lane 4 : Human brain tissue lysate - total protein (**ab29466**) with Human FOXG1 peptide (**ab19644**) at 1 µg/ml

Lane 5 : Brain (Mouse) Tissue Lysate with Human FOXG1 peptide (**ab19644**) at 1 µg/ml

Lane 6 : Brain (Rat) Tissue Lysate with Human FOXG1 peptide (**ab19644**) at 1 µg/ml

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: 50 kDa

Observed band size: 50 kDa

Exposure time: 1 minute

ab18259 detects a band of ~50kDa in brain lysates. This band is blocked by addition of the immunizing peptide **ab19644** which suggests that is specific for FOXG1.

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes.

The membrane was then blocked for an hour using 5% Bovine Serum Albumin before being incubated with ab18259 overnight at 4°C. Antibody binding was detected using an **anti-rabbit HRP** secondary antibody, and visualised using ECL development solution.



ab18259 staining Foxg1 (1/50) in the telencephalon (but not the diencephalon) as expected. DAB-immunohistochemistry was performed on embryonic (E13.5) mouse brain (coronal paraffin-embedded sections) after microwave treatment with 10mM sodium citrate.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXG1 antibody (ab18259)

This image is courtesy of Vassiliki Fotaki, University of Edinburgh

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 <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