abcam

Product datasheet

Anti-FOXL2 antibody [EPR23523-68] - BSA and Azide free ab272050

Recombinant RabMAb

1 References 9 Images

Overview

Product name	Anti-FOXL2 antibody [EPR23523-68] - BSA and Azide free
Description	Rabbit monoclonal [EPR23523-68] to FOXL2 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** ICC/IF, WB, IHC-P, IHC-Fr, IP **Unsuitable for:** Flow Cyt
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Mouse ovary, Rat ovary, Rat testis and K-562, Human ovary lysates. IHC-P: Mouse ovary, Rat ovary and Human ovary, Mouse spleen tissues. IHC-Fr: Mouse ovary tissue. IP: Mouse ovary cell lysate. ICC/IF: NIH/3T3 and K-562 cells.
General notes	**ab252050** is the carrier-free version of **ab246511**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR23523-68
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab272050 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
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 50 kDa (predicted molecular weight: 38 kDa). We do not recommend this antibody for WB using human samples.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IHC-Fr		Use at an assay dependent concentration. Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).
IP		Use at an assay dependent concentration.

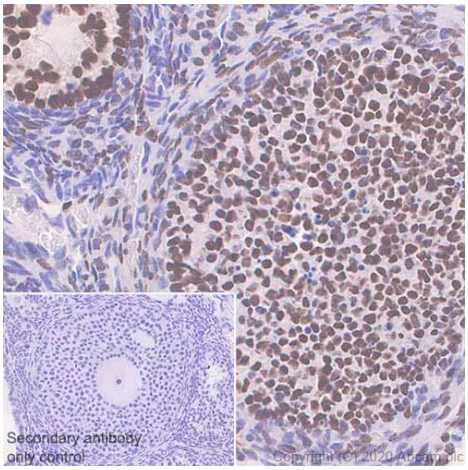
Application notes Is unsuitable for Flow Cyt.

Target

Function Transcriptional regulator. Critical factor essential for ovary differentiation and maintenance, and repression of the genetic program for somatic testis determination. Prevents trans-differentiation of ovary to testis throught transcriptional repression of the Sertoli cell-promoting gene SOX9 (By similarity). Has apoptotic activity in ovarian cells. Suppresses ESR1-mediated transcription of PTGS2/COX2 stimulated by tamoxifen (By similarity). Is a regulator of CYP19 expression (By

	similarity). Participates in SMAD3-dependent transcription of FST via the intronic SMAD-binding element (By similarity). Is a transcriptional repressor of STAR. Activates SIRT1 transcription under cellular stress conditions. Activates transcription of OSR2.
Tissue specificity	In addition to its expression in the developing eyelid, it is transcribed very early in somatic cells of the developing gonad (before sex determination) and its expression persists in the follicular cells of the adult ovary.
Involvement in disease	Defects in FOXL2 are a cause of blepharophimosis, ptosis, and epicanthus inversus syndrome (BPES) [MIM:110100]; also known as blepharophimosis syndrome. It is an autosomal dominant disorder characterized by eyelid dysplasia, small palpebral fissures, drooping eyelids and a skin fold running inward and upward from the lower lid. In type I BPSE (BPES1) eyelid abnormalities are associated with female infertility. Affected females show an ovarian deficit due to primary amenorrhea or to premature ovarian failure (POF). In type II BPSE (BPES2) affected individuals show only the eyelid defects. There is a mutational hotspot in the region coding for the poly-Ala domain, since 30% of all mutations in the ORF lead to poly-Ala expansions, resulting mainly in BPES type II. Defects in FOXL2 are a cause of premature ovarian failure type 3 (POF3) [MIM:608996]. An ovarian disorder defined as the cessation of ovarian function under the age of 40 years. It is characterized by oligomenorrhea or amenorrhea, in the presence of elevated levels of serum gonadotropins and low estradiol.
Sequence similarities	Contains 1 fork-head DNA-binding domain.
Post-translational modifications	Sumoylated by SUMO1; sumoylation is required for transcriptional repression activity.
Cellular localization	Nucleus.

Images



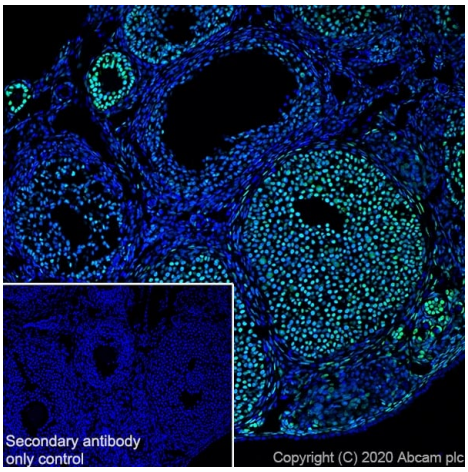
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXL2 antibody [EPR23523-68] - BSA and Azide free (ab272050)

Immunohistochemical analysis of paraffin-embedded Mouse ovary tissue labeling FOXL2 with **ab246511** at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Nuclear staining on granulosa cells and some other cells in mouse ovary. The section was incubated with **ab246511** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab246511**).

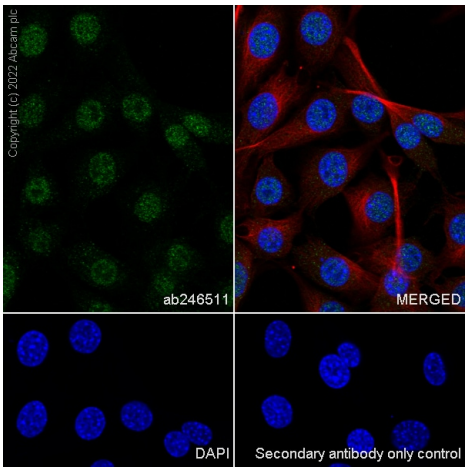


Immunohistochemistry (Frozen sections) - Anti-FOXL2 antibody [EPR23523-68] - BSA and Azide free (ab272050)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized Mouse ovary tissue labeling FOXL2 with **ab246511** at 1/250 dilution followed by **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution (green). Nuclear staining on mouse ovary. The nuclear counter stain is DAPI (blue).

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

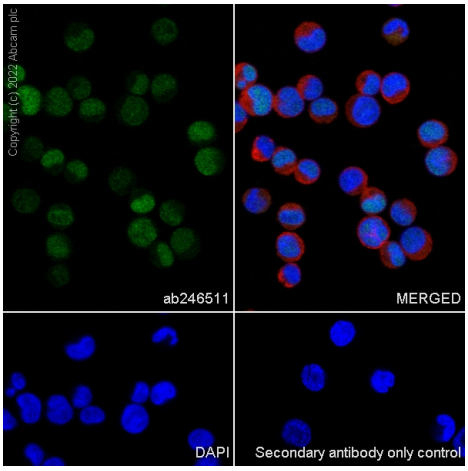
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab246511**).



Immunocytochemistry/ Immunofluorescence - Anti-FOXL2 antibody [EPR23523-68] - BSA and Azide free (ab272050)

Immunofluorescent analysis of 100% Methanol-fixed, 0.1% Triton X-100 permeabilized NIH/3T3 (mouse embryonic fibroblast cell line) cells labelling FOXL2 with primary antibody anti-FOXL2 (**ab246511**) at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed (**ab150081**) secondary antibody at 1/1000 dilution. Confocal image showing mainly nuclear staining in NIH/3T3 cell line. Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) was used to counterstain tubulin at 1/200 dilution. The nuclear counter stain is DAPI (blue).

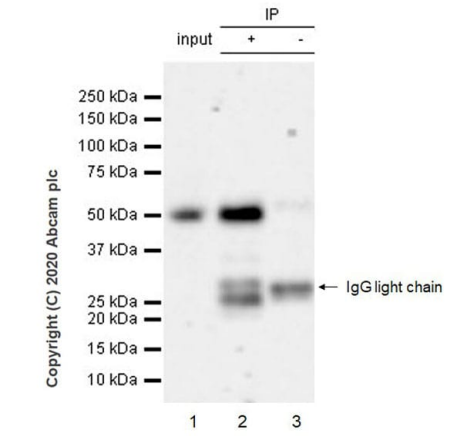
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab246511**).



Immunocytochemistry/ Immunofluorescence - Anti-FOXL2 antibody [EPR23523-68] - BSA and Azide free (ab272050)

Immunofluorescent analysis of 80% Methanol-fixed, 0.1% Triton X-100 permeabilized K-562 (human chronic myelogenous leukemia lymphoblasts) cells labelling FOXL2 with primary antibody anti-FOXL2 (**ab246511**) at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed (**ab150081**) secondary antibody at 1/1000 dilution. Confocal image showing mainly nuclear staining in K-562 cell line. Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) was used to counterstain tubulin at 1/200 dilution. The nuclear counter stain is DAPI (blue).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab246511**).



Immunoprecipitation - Anti-FOXL2 antibody [EPR23523-68] - BSA and Azide free (ab272050)

FOXL2 was immunoprecipitated from 0.35 mg Mouse ovary tissue lysate with **ab246511** at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using **ab246511** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(**ab131366**) was used at 1/5000 dilution.

Lane 1: Mouse ovary tissue lysate 10ug

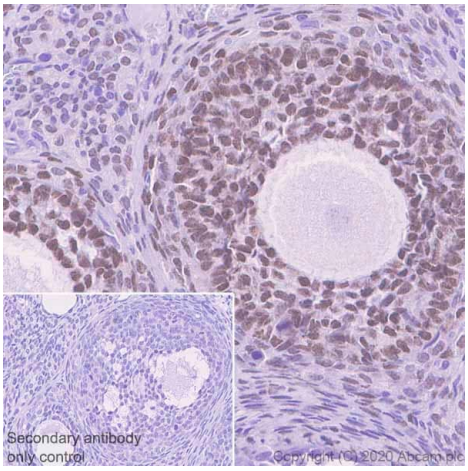
Lane 2: **ab246511** IP in Mouse ovary tissue lysate

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab246511** in mouse ovary tissue lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 84 seconds

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab246511**).



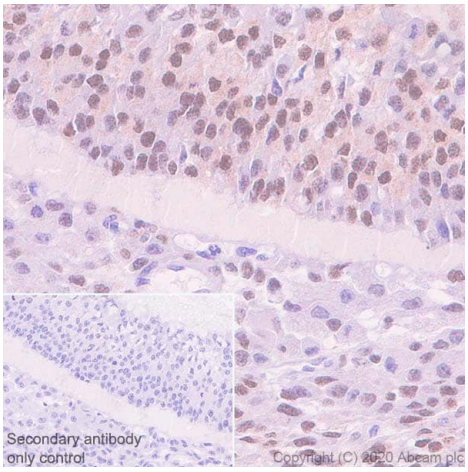
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXL2 antibody [EPR23523-68] - BSA and Azide free (ab272050)

Immunohistochemical analysis of paraffin-embedded Rat ovary tissue labeling FOXL2 with **ab246511** at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Nuclear staining on granulosa cells and some other cells in rat ovary. The section was incubated with **ab246511** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab246511**).



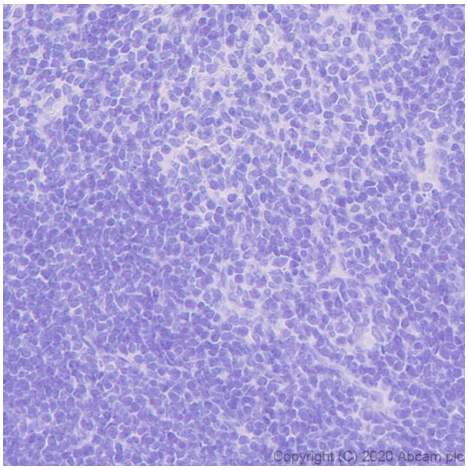
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXL2 antibody [EPR23523-68] - BSA and Azide free (ab272050)

Immunohistochemical analysis of paraffin-embedded Human ovary tissue labeling FOXL2 with **ab246511** at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on human ovary. The section was incubated with **ab246511** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab246511**).



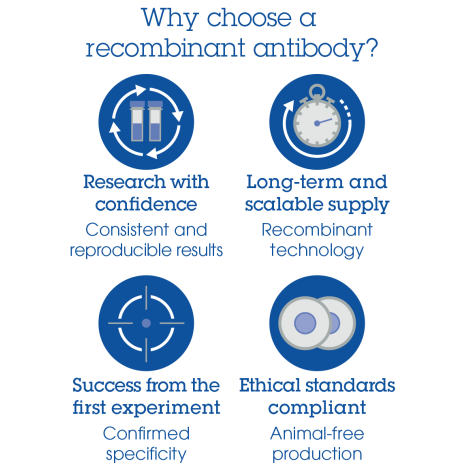
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXL2 antibody [EPR23523-68] - BSA and Azide free (ab272050)

Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labeling FOXL2 with **ab246511** at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). **Negative control:** No staining on mouse spleen. The section was incubated with **ab246511** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab246511**).



Anti-FOXL2 antibody [EPR23523-68] - BSA and Azide free (ab272050)

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