abcam

Product datasheet

Anti-FOXA2 antibody [EPR4466] - BSA and Azide free ab220810

Recombinant RabMAb

1 References 7 Images

Overview

Product name	Anti-FOXA2 antibody [EPR4466] - BSA and Azide free
Description	Rabbit monoclonal [EPR4466] to FOXA2 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide (the amino acid sequence is considered to be commercially sensitive) corresponding to Human FOXA2 aa 350-450.
Positive control	WB: Human colon cancer, fetal colon and mouse lung tissue lysates and HepG2 cell lysate. IHC-P: Human hepatocellular carcinoma and mouse liver tissue. ICC/IF: HT-29 cells.
General notes	The formulation and the concentration of this product is compatible for metal-conjugation for mass cytometry (CyTOF®). 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. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® patents. This product is a recombinant rabbit monoclonal antibody.

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: 7.40 Constituent: PBS
Purity	Protein A purified
Clonality	Monoclonal

Clone number	EPR4466
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab220810** in the following tested applications.

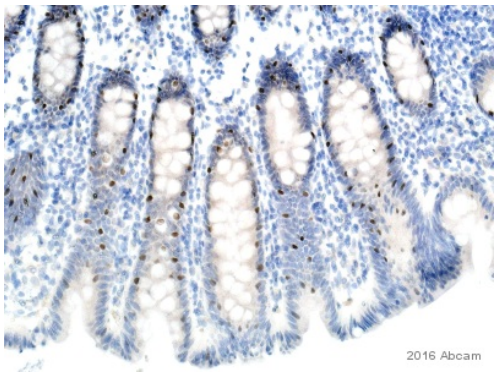
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 52 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols.
ICC/IF		Use at an assay dependent concentration.

Target

Function	Transcription factor that is involved in embryonic development, establishment of tissue-specific gene expression and regulation of gene expression in differentiated tissues. Is thought to act as a 'pioneer' factor opening the compacted chromatin for other proteins through interactions with nucleosomal core histones and thereby replacing linker histones at target enhancer and/or promoter sites. Binds DNA with the consensus sequence 5'-[AC]A[AT]T[AG]TT[GT][AG][CT]T[CT]-3' (By similarity). In embryonic development is required for notochord formation. Involved in the development of multiple endoderm-derived organ systems such as the liver, pancreas and lungs; FOXA1 and FOXA2 seem to have at least in part redundant roles. Originally discribed as a transcription activator for a number of liver genes such as AFP, albumin, tyrosine aminotransferase, PEPCK, etc. Interacts with the cis-acting regulatory regions of these genes. Involved in glucose homeostasis; regulates the expression of genes important for glucose sensing in pancreatic beta-cells and glucose homeostasis. Involved in regulation of fat metabolism. Binds to fibrinogen beta promoter and is involved in IL6-induced fibrinogen beta transcriptional activation.
Sequence similarities	Contains 1 fork-head DNA-binding domain.
Post-translational modifications	Phosphorylation on Thr-156 abolishes binding to target promoters and subsequent transcription activation upon insulin stimulation.
Cellular localization	Nucleus. Cytoplasm. Shuttles between the nucleus and cytoplasm in a CRM1-dependent manner and in response to insulin signaling via AKT1 is exported from the nucleus.

Images

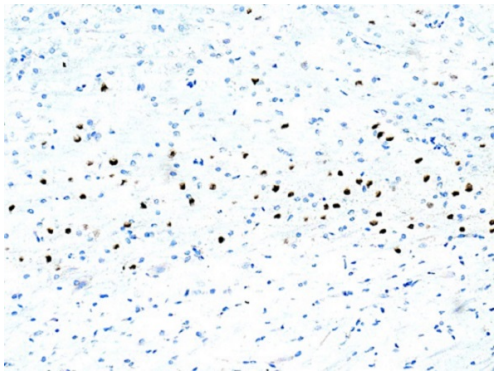


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXA2 antibody [EPR4466] - BSA and Azide free (ab220810)

This image is courtesy of Carl Hobbs, King's College London, United Kingdom

Immunohistochemical analysis of Formalin/PFA-fixed paraffin-embedded human colon sections labelling FOXA2 with ab108422 at dilution of 1/500. The secondary antibody used was a polyclonal goat anti-rabbit biotin conjugated antibody at a dilution of 1/300. The sample was counterstained with hematoxylin. Antigen retrieval was heat mediated using citric acid.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108422).

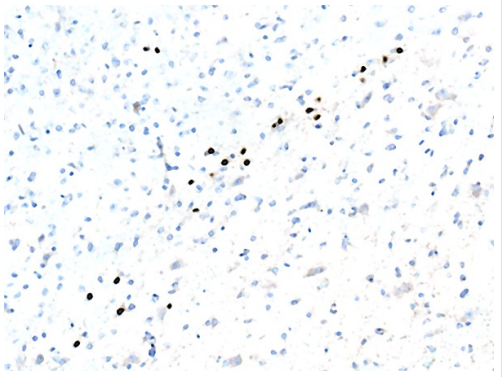


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXA2 antibody [EPR4466] - BSA and Azide free (ab220810)

This image is courtesy of Carl Hobbs, King's College London, United Kingdom

ab108422 staining of FOXA2 in rat brain (substantia nigra) tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Heat-mediated antigen retrieval was carried out using citric acid. Samples were incubated with primary antibody (1/500) for two hours at room temperature. A Biotin-conjugated goat anti-rabbit IgG polyclonal was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108422).

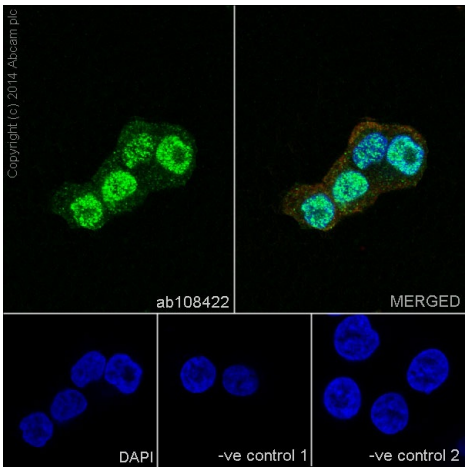


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXA2 antibody [EPR4466] - BSA and Azide free (ab220810)

This image is courtesy of Carl Hobbs, King's College London, United Kingdom

ab108422 staining of FOXA2 in mouse brain (substantia nigra) tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Heat-mediated antigen retrieval was carried out using citric acid. Samples were incubated with primary antibody (1/500) for two hours at room temperature. A Biotin-conjugated goat anti-rabbit IgG polyclonal was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108422).



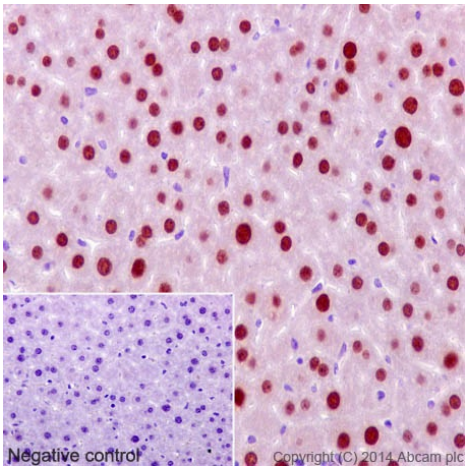
Immunocytochemistry/ Immunofluorescence - Anti-FOXA2 antibody [EPR4466] - BSA and Azide free (ab220810)

Immunocytochemistry/Immunofluorescence analysis of HT-29 cells labelling FOXA2 with purified ab108422 at 1/300. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. ab150077, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. ab7291, a mouse anti-tubulin (1/500) and ab150120, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/500) were also used.

-ve control 1: primary antibody (1/300) and secondary antibody, ab150120, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/500).

-ve control 2: ab7291 (1/1000) and secondary antibody, ab150077, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/500).

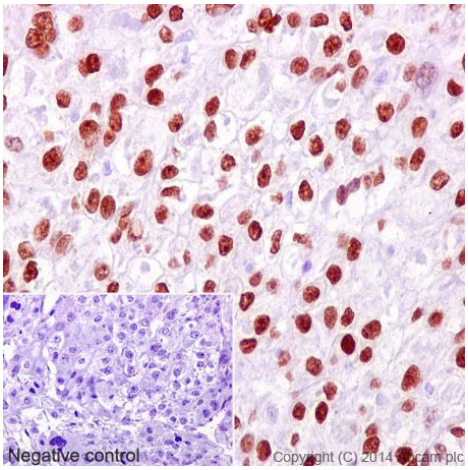
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108422).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXA2 antibody [EPR4466] - BSA and Azide free (ab220810)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse liver tissue labelling FOXA2 with purified ab108422 at 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

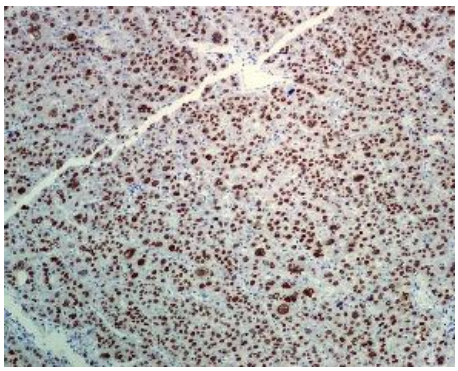
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108422).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXA2 antibody [EPR4466] - BSA and Azide free (ab220810)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human hepatocellular carcinoma tissue labelling FOXA2 with purified ab108422 at 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108422).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXA2 antibody [EPR4466] - BSA and Azide free (ab220810)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human hepatocellular carcinoma tissue labelling FOXA2 with unpurified ab108422 at a 1/250 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108422).

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