abcam

Product datasheet

Alexa Fluor® 647 Anti-FOXA2 antibody [EPR4466] ab193879



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Overview

Product name Alexa Fluor® 647 Anti-FOXA2 antibody [EPR4466]

Description Alexa Fluor® 647 Rabbit monoclonal [EPR4466] to FOXA2

Host species Rabbit

Alexa Fluor® 647. Ex: 652nm, Em: 668nm Conjugation

Tested applications Suitable for: ICC/IF Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. **Immunogen**

Positive control ICC/IF: HepG2 cells.

General notes 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**.

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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.

Avoid freeze / thaw cycle. Store In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS

Purity Protein A purified

Clonality Monoclonal
Clone number EPR4466

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise quarantee covers the use of ab193879 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		1/50.

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 similaritiesContains 1 fork-head DNA-binding domain.

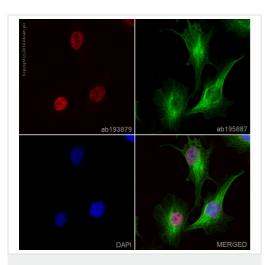
Post-translational modifications

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.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-FOXA2 antibody [EPR4466] (ab193879)

ab193879 staining FOXA2 in HepG2 cells. The cells were fixed with 4% formaldehyde (10 min), permeabilised in 0.1% Triton X-100 for 5 minutes and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab193879 at a working dilution of 1 in 50 (shown in red) and <u>ab195887</u>, Mouse monoclonal [DM1A] to alpha Tubulin (Alexa Fluor[®] 488, shown in green) at 2μ g/ml overnight at +4°C. Nuclear DNA was labelled in blue with DAPI.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



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