abcam

Product datasheet

Anti-Transcription factor AP-2-alpha antibody ab52222

*** * * * * 8 Abreviews 27 References 2 Images

Overview

Product name Anti-Transcription factor AP-2-alpha antibody

Description Rabbit polyclonal to Transcription factor AP-2-alpha

Host species Rabbit

Tested applications Suitable for: ELISA, WB, IHC-P

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat, Chicken

Immunogen Synthetic peptide corresponding to Human Transcription factor AP-2-alpha.

Database link: P05549

General notes

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.

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

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.

Storage buffer pH: 7

Preservative: 0.02% Sodium azide

Constituents: PBS, 50% Glycerol, 0.87% Sodium chloride

Without Mg+2 and Ca+2

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab52222 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 |
|-------------|------------------|--|
| ELISA | | Use at an assay dependent concentration. |
| WB | **** <u>(2)</u> | 1/500 - 1/1000. Detects a band of approximately 48 kDa (predicted molecular weight: 48 kDa). |
| IHC-P | ★★★★★ (2) | Use at an assay dependent concentration. |

Target

Function

Sequence-specific DNA-binding protein that interacts with inducible viral and cellular enhancer elements to regulate transcription of selected genes. AP-2 factors bind to the consensus sequence 5'-GCCNNNGGC-3' and activate genes involved in a large spectrum of important biological functions including proper eye, face, body wall, limb and neural tube development. They also suppress a number of genes including MCAM/MUC18, C/EBP alpha and MYC. AP-2-alpha is the only AP-2 protein required for early morphogenesis of the lens vesicle.

Involvement in disease

Defects in TFAP2A are the cause of branchiooculofacial syndrome (BOFS) [MIM:113620]; also known as branchial clefts with characteristic facies, growth retardation, imperforate nasolacrimal duct, and premature aging or lip pseudocleft-hemangiomatous branchial cyst syndrome. BOFS is a rare autosomal dominant cleft palate craniofacial disorder with variable expressivity. The major features include cutaneous anomalies, ocular anomalies, characteristic facial appearance (malformed pinnae, oral clefts), and, less commonly, renal and ectodermal (dental and hair) anomalies.

Sequence similarities

Belongs to the AP-2 family.

Domain

The WW-binding motif mediates interaction with WWOX.

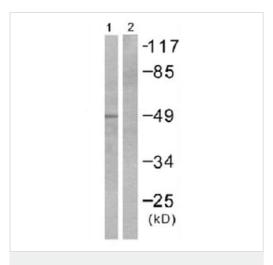
Post-translational modifications

Sumoylated on Lys-10; which inhibits transcriptional activity.

Cellular localization

Nucleus.

Images



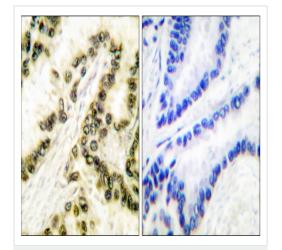
Western blot - Anti-Transcription factor AP-2-alpha antibody (ab52222)

All lanes : Anti-Transcription factor AP-2-alpha antibody (ab52222) at 1/500 dilution

Lane 1: COLO 205 (Human colon adenocarcinoma cell line) extracts

Lane 2: COLO 205 (Human colon adenocarcinoma cell line) extracts with immunizing peptide

Predicted band size: 48 kDa **Observed band size:** 48 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Transcription factor AP-2-alpha antibody (ab52222)

Immunohistochemical staining of paraffin embedded human breast carcinoma tissue using ab52222.

Left: - peptide. Right: + peptide.

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- Replacement or refund for products not performing as stated on the datasheet
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- We investigate all quality concerns to ensure our products perform to the highest standards

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