

## Anti-AP2 Alpha Picoband Antibody

Catalog # ABO11821

#### Specification

## Anti-AP2 Alpha Picoband Antibody - Product Information

Application	WB	
Primary Accession	<u>P05549</u>	
Host	Rabbit	
Reactivity	Human, Rat	
Clonality	Polyclonal	
Format	Lyophilized	
Description		
Rabbit IgG polyclonal antibody for Transe	cription factor AP-2-alpha(TFAP2A) detection. Tested w	ith

WB in Human;Rat.
Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Anti-AP2 Alpha Picoband Antibody - Additional Information

Gene ID 7020

**Other Names** Transcription factor AP-2-alpha, AP2-alpha, AP-2 transcription factor, Activating enhancer-binding protein 2-alpha, Activator protein 2, AP-2, TFAP2A, AP2TF, TFAP2

Calculated MW 48062 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Human, Rat<br>

**Subcellular Localization** Nucleus .

Protein Name Transcription factor AP-2-alpha

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

E.coli-derived human AP2 alpha recombinant protein (Position: M1-G166). Human AP2 alpha shares 98% amino acid (aa) sequence identity with both mouse and rat AP2 alpha.

**Purification** Immunogen affinity purified.

**Cross Reactivity** 



No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the AP-2 family.

## Anti-AP2 Alpha Picoband Antibody - Protein Information

Name TFAP2A

Synonyms AP2TF, TFAP2

#### 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. Together with the CITED2 coactivator, stimulates the PITX2 P1 promoter transcription activation. Associates with chromatin to the PITX2 P1 promoter region.

**Cellular Location** Nucleus.

## **Anti-AP2 Alpha Picoband Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-AP2 Alpha Picoband Antibody - Images



97KD — 58KD — 40KD — — 29KD — 20KD — 14KD —

Anti-AP2 alpha Picoband antibody, ABO11821-1.jpgAll lanes: Anti AP2A (ABO11821) at 0.5ug/mlWB: Recombinant Human AP2A Protein 0.5ngPredicted bind size: 38KDObserved bind size: 38KD



Anti-AP2 alpha Picoband antibody, ABO11821-2.jpgAll lanes: Anti AP2A (ABO11821) at 0.5ug/mlWB: Rat Spleen Tissue Lysate at 50ugPredicted bind size: 48KD Observed bind size: 48KD

# Anti-AP2 Alpha Picoband Antibody - Background

TFAP2A, also known as AP-2alpha or BOFS, is a protein that in humans is encoded by the TFAP2A gene. It is mapped to 6p24.3. The protein encoded by this gene is a transcription factor that binds the consensus sequence 5'-GCCNNNGGC-3'. The encoded protein functions as either a homodimer or as a heterodimer with similar family members. This protein activates the transcription of some genes while inhibiting the transcription of others. TFAP2A acts as a sequence-specific DNA-binding transcription factor recognizing and binding to the specific DNA sequence and recruiting transcription machinery. This gene is expressed in neural crest cell lineages with the highest levels of expression corresponding to early neural crest cells, suggesting that TFAP2A plays a role in their differentiation and development.