



Rabbit Anti-AP2 alpha antibody

SL3569R

Product Name:	AP2 alpha
Chinese Name:	转录激活蛋白2 α /TFAP2 α /AP-2 α 抗体
Alias:	Activating enhancer binding protein 2 alpha; Activating enhancer-binding protein 2-alpha; Activator protein 2; AP 2; AP 2 transcription factor; AP 2alpha; AP-2; AP-2 transcription factor; AP2; AP2 Transcription Factor; AP2-alpha; AP2A_HUMAN; AP2TF; BOFS; Clathrin Adaptor Protein Complex; FLJ51761; TFAP 2; TFAP 2A; TFAP2; TFAP2A; Transcription factor AP 2 alpha (activating enhancer binding protein 2 alpha); Transcription factor AP 2 alpha; Transcription factor AP-2-alpha; Transcription factor AP2 alpha.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	48kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human AP2 alpha:351-437/437
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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. Defects in this gene are a cause of branchiooculofacial syndrome (BOFS). Three transcript variants encoding different isoforms have been found for this gene.

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.

Subunit:

Binds DNA as a dimer. Can form homodimers or heterodimers with other AP-2 family members. Interacts with WWOX. Interacts with CITED4. Interacts with UBE2I. Interacts with RALBP1 in a complex also containing EPN1 and NUMB during interphase and mitosis. Interacts with KCTD1; this interaction represses transcription activation. Interacts (via C-terminus) with CITED2 (via C-terminus); the interaction stimulates TFAP2A-transcriptional activation. Interacts (via N-terminus) with EP300 (via N-terminus); the interaction requires CITED2.

Subcellular Location:

Nucleus.

Post-translational modifications:

Sumoylated on Lys-10; which inhibits transcriptional activity (Probable).

DISEASE:

Branchiooculofacial syndrome (BOFS) [MIM:113620]: A syndrome characterized by growth retardation, bilateral branchial sinus defects with hemangiomatous, scarred skin, cleft lip with or without cleft palate, pseudocleft of the upper lip, nasolacrimal duct obstruction, low set ears with posterior rotation, a malformed, asymmetrical nose with a broad bridge and flattened tip, conductive or sensorineural deafness, ocular and renal anomalies. Note=The disease is caused by mutations affecting the gene represented in this entry.

Similarity:

Belongs to the AP-2 family.

SWISS:

P05549

Gene ID:
7020

Database links:

[Entrez Gene: 7020](#)Human

[Entrez Gene: 21418](#)Mouse

[Entrez Gene: 306862](#)Rat

[Omin: 107580](#)Human

[SwissProt: P05549](#)Human

[SwissProt: P34056](#)Mouse

[SwissProt: P58197](#)Rat

[Unigene: 519880](#)Human

[Unigene: 85544](#)Mouse

[Unigene: 22545](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

转录因子AP-

2 α 在哺乳动物发育、分化以及Tumour的发生等生命现象中起重要作用.