TFAP2A Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	Tfap2a, Polyclonal Antibody
Full Product Name	Tfap2a (Transcription Factor AP-2-alpha, AP2-alpha, AP-2 Transcription Factor, Activating Enhancer-Binding Protein 2-alpha, Activator Protein 2, AP-2, Tfap2a, Ap2tf, Tcfap2a) (PE)
Product Gene Name	anti-Tfap2a antibody
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Mouse
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with R-Phycoerythrin (PE).
Purity/Purification	Purified by Protein A Affinity Chromatography.
Specificity	Recognizes mouse Tfap2a. Species Crossreactivity: mouse
Preparation and Storage	Store product at 4 degree C in the dark. DO NOT FREEZE! Stable at 4 degree C for 12 months after receipt as an undiluted liquid. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Caution: PE conjugates are sensitive to light. For maximum recovery of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	47,971 Da
Chromosome Location	Chromosome: 13; NC_000079.6 (40715675..40733823, complement). Location: 13 A5-B1; 13 20.01 cM
3D Structure	ModBase 3D Structure for P34056
Immunogen	KLH conjugated synthetic peptide corresponding to aa134-166 at the Central region of mouse Tfap2a. Species sequence homology: bovine, rat
Conjugate	PE
Note	Preservative Free
Product Categories/Family for anti-Tfap2a antibody	Antibodies; Transcription Factors
Applications Tested/Suitable for anti-Tfap2a antibody	Western Blot (WB)
Application Notes for anti-Tfap2a antibody	WB: 1:1000 Applications are based on unconjugated antibody.
Related Product Information for anti-Tfap2a antibody	MBS6459725 is an antibody targeting Tfap2a. Also known as Tfap2a (Transcription Factor AP-2-alpha, AP2-alpha, AP-2 Transcription Factor, Activating Enhancer-Binding Protein 2-alpha, Activator Protein 2, AP-2, Tfap2a, Ap2tf, Tcfap2a) (PE). Reactive in Mouse. Host: Rabbit.
Product References and Citations for anti-Tfap2a antibody	Moser M., et al. Nucleic Acids Res. 21:4844-4844(1993). Meier P., et al. Dev. Biol. 169:1-14(1995). Carninci P., et al. Science 309:1559-1563(2005). Mitchell P.J., et al. Genes Dev. 5:105-119(1991). Yahata T., et al. Genomics 80:601-613(2002).
Other Notes	Small volumes of anti-Tfap2a antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for Tfap2a. It may not necessarily be applicable to this product.

NCBI GI #	171846238
NCBI GeneID	21418
NCBI Accession #	NP_001116420.1
UniProt Primary Accession #	P34056
UniProt Secondary Accession #	P58197; A1A4R9; Q9N0N3
UniProt Related Accession #	P34056
GenBank Nucleotide #	NM_001122948.1
NCBI Official Full Name	transcription factor AP-2-alpha isoform b
NCBI Official Synonym Full Names	transcription factor AP-2, alpha
NCBI Official Symbol	Tfap2a
NCBI Official Synonym Symbols	Ap2; AP-2; Ap2tf; Tcfap2a; AP2alpha
UniProt Protein Name	Transcription factor AP-2-alpha
UniProt Synonym Protein Names	AP-2 transcription factor; Activating enhancer-binding protein 2-alpha; Activator protein 2
Protein Family	Transcription factor
UniProt Gene Name	Tfap2a
UniProt Synonym Gene Names	Ap2tf; Tcfap2a; AP2-alpha; AP-2
UniProt Entry Name	AP2A_MOUSE
NCBI Protein Information	transcription factor AP-2-alpha; Ap-2 (a); AP2-alpha; AP-2 alpha; activator protein 2; AP-2 transcription factor; activating enhancer-binding protein 2 alpha; activating enhancer-binding protein 2-alpha
NCBI Summary for Tfap2a	This gene is a member of the activator protein 2 (AP-2) transcription factor family. The protein encoded by this gene can act as both an activator and repressor of gene transcription, and plays an important role in early embryogenesis, specifically in cranial development. This protein forms both homodimers and heterodimers, and binds to a GC-rich consensus sequence found in some promoters and enhancers. Disruption of this gene causes perinatal death, with neural tube, craniofacial, and limb mesenchyme defects. Alternative splicing results in multiple transcript variants that encode multiple protein isoforms. [provided by RefSeq, Sep 2014]

UniProt Comments for Tfap2a	AP-2 alpha: 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. 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. Belongs to the AP-2 family. 3 isoforms of the human protein are produced by alternative splicing. Protein type: Transcription factor; DNA-binding Cellular Component: nucleoplasm; Golgi apparatus; centrosome; transcription factor complex; intracellular membrane-bound organelle; cytoplasm; cytosol; nucleus Molecular Function: protein dimerization activity; protein binding; DNA binding; sequence-specific DNA binding; transcription coactivator activity; chromatin binding; transcription factor binding; transcription factor activity Biological Process: embryonic forelimb morphogenesis; negative regulation of epidermal growth factor receptor signaling pathway; transcription from RNA polymerase II promoter; skin development; neural crest cell development; regulation of neuron differentiation; positive regulation of transcription, DNA-dependent; response to lipopolysaccharide; palate development; negative regulation of transcription from RNA polymerase II promoter; embryonic pattern specification; forelimb morphogenesis; negative regulation of cell proliferation; sympathetic nervous system development; sensory perception of sound; regulation of transcription, DNA-dependent; oculomotor nerve formation; regulation of cell differentiation; positive regulation of neuron apoptosis; epidermis morphogenesis; negative regulation of neuron apoptosis; kidney development; inner ear morphogenesis; trigeminal nerve development; anterior neuropore closure; transcription, DNA-dependent; embryonic cranial skeleton morphogenesis; positive regulation of bone mineralization; regulation of transcription from RNA polymerase II promoter; embryonic body morphogenesis; skeletal morphogenesis; forebrain neuron development; neural tube closure; lens morphogenesis in camera-type eye; positive regulation of transcription from RNA polymerase II promoter; embryonic camera-type eye morphogenesis; negative regulation of transcription, DNA-dependent; negative regulation of apoptosis; positive regulation of cell migration
Research Articles on Tfap2a	**1.** Ameloblast-like LS8 cells treated with the enamel matrix protein complex Emdogain showed upregulation of AP-2 and clathrin subunits
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