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Alx1 Rabbit pAb

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Catalog # AP57794

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q15699
Reactivity	Human, Mouse, Rat
Predicted	Dog, Horse, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36961
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Alx1
Epitope Specificity	231-326/326
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	Preservative: 0.02% Proclin300, Constituents: 1% BSA, 0.01M PBS, pH7.4.
SUBCELLULAR LOCATION	Nucleus.
SIMILARITY	Belongs to the paired homeobox family. Contains 1 homeobox DNA-binding domain.
SUBUNIT	Interacts (via homeobox domain) with EP300.
Post-translational modifications	Acetylated at Lys-131 by EP300, leading to increased interaction with EP300 and enhances transcriptional activation activity.
DISEASE	Defects in ALX1 are the cause of frontonasal dysplasia type 3 (FND3) [MIM:613456]. The term frontonasal dysplasia describes an array of abnormalities affecting the eyes, forehead and nose and linked to midfacial dysraphia. The clinical picture is highly variable. Major findings include true ocular hypertelorism; broadening of the nasal root; median facial cleft affecting the nose and/or upper lip and palate; unilateral or bilateral clefting of the alae nasi; lack of formation of the nasal tip; anterior cranium bifidum occultum; a V-shaped or widow's peak frontal hairline.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The specific function of this gene has yet to be determined in humans; however, in rodents, it is necessary for survival of the forebrain mesenchyme and may also be involved in development of the cervix. Mutations in the mouse gene lead to neural tube defects such as acrania and meroanencephaly. [provided by RefSeq, Jul 2008].

Additional Information

Gene ID	8092
Other Names	ALX homeobox protein 1, Cartilage homeoprotein 1, ALX1 (HGNC:1494)

Target/Specificity	Cartilage and cervix tissue.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	ALX1 (HGNC:1494)
Function	Sequence-specific DNA-binding transcription factor that binds palindromic sequences within promoters and may activate or repress the transcription of a subset of genes (PubMed:8756334, PubMed:9753625). Most probably regulates the expression of genes involved in the development of mesenchyme-derived craniofacial structures. Early on in development, it plays a role in forebrain mesenchyme survival (PubMed:20451171). May also induce epithelial to mesenchymal transition (EMT) through the expression of SNAI1 (PubMed:23288509).
Cellular Location	Nucleus
Tissue Location	Cartilage and cervix tissue.

Background

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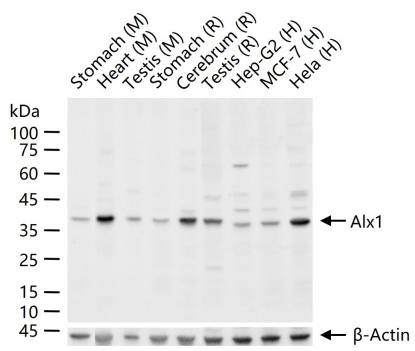
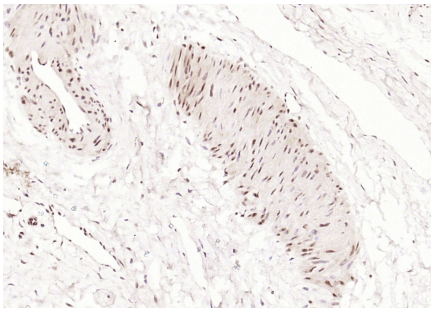
Images



25 ug total protein per lane of various lysates (see on figure) probed with Alx1 polyclonal antibody, unconjugated (AP57794) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



Paraformaldehyde-fixed, paraffin embedded (human cervical); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Alx1) Polyclonal Antibody, Unconjugated (AP57794) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.