abcam

Product datasheet

Anti-PAX3 antibody ab180754

4 Images

Overview

Product name	Anti-PAX3 antibody
Description	Rabbit polyclonal to PAX3
Tested applications	**Suitable for:** ICC/IF, WB, IHC-P
Species reactivity	**Reacts with:** Mouse, Rat, Human **Predicted to work with:** Xenopus laevis
Immunogen	Recombinant full length protein corresponding to Human PAX3 aa 1-206. Sequence: MTTLAGAVPRMMRPGPGQNYPRSGFPLEVSTPLGQGRVNQLGGVFINGRP LPNHIRHKIVEMAHHGIRPCVISRQLRVSHGCVSKILCRYQETGSIRPGA IGGSKPKQVTTPDVEKKIEEYKRENPGMFSWEIRDKLLKDAVCDRNTVPS VSSISRILRSKFGKGEEEEADLERKEAEESEKKAKHSIDGILSERGKALV SGVSSH Database link: P23760-3 Run BLAST with Run BLAST with
Positive control	Extracts of A431 cell lines.

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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.3 Preservative: 0.02% Sodium azide Constituents: 49% PBS, 50% Glycerol
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab180754** 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
ICC/IF		Use at an assay dependent concentration.
WB		1/500 - 1/2000. Predicted molecular weight: 23 kDa.
IHC-P		1/50 - 1/200. ab171870 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.

Target

Function

Probable transcription factor associated with development of alveolar rhabdomyosarcoma.

Involvement in disease

Defects in PAX3 are the cause of Waardenburg syndrome type 1 (WS1) [MIM:193500]. WS1 is an autosomal dominant disorder characterized by wide bridge of nose owing to lateral displacement of the inner canthus of each eye (dystopia canthorum), pigmentary disturbances such as frontal white blaze of hair, heterochromia of irides, white eyelashes, leukoderma and sensorineural deafness. The syndrome shows variable clinical expression and some affected individuals do not manifest hearing impairment.
Defects in PAX3 are the cause of Waardenburg syndrome type 3 (WS3) [MIM:148820]; also known as Klein-Waardenburg syndrome or Waardenburg syndrome with upper limb anomalies or white forelock with malformations. WS3 is a very rare autosomal dominant disorder, which shares many of the characteristics of WS1. Patients additionally present with musculoskeletal abnormalities.
Defects in PAX3 are the cause of craniofacial-deafness-hand syndrome (CDHS) [MIM:122880]. CDHS is thought to be an autosomal dominant disease which comprises absence or hypoplasia of the nasal bones, hypoplastic maxilla, small and short nose with thin nares, limited movement of the wrist, short palpebral fissures, ulnar deviation of the fingers, hypertelorism and profound sensory-neural deafness.
Defects in PAX3 are a cause of rhabdomyosarcoma type 2 (RMS2) [MIM:268220]. It is a form of rhabdomyosarcoma, a highly malignant tumor of striated muscle derived from primitive mesenchimal cells and exhibiting differentiation along rhabdomyoblastic lines.
Rhabdomyosarcoma is one of the most frequently occurring soft tissue sarcomas and the most common in children. It occurs in four forms: alveolar, pleomorphic, embryonal and botryoidal rhabdomyosarcomas. Note=A chromosomal aberration involving PAX3 is found in rhabdomyosarcoma. Translocation (2;13)(q35;q14) with FOXO1. The resulting protein is a transcriptional activator.
Note=A chromosomal aberration involving PAX3 is a cause of rhabdomyosarcoma. Translocation t(2;2)(q35;p23) with NCOA1 generates the NCOA1-PAX3 oncogene consisting of the N-terminus part of PAX3 and the C-terminus part of NCOA1. The fusion protein acts as a transcriptional activator. Rhabdomyosarcoma is the most common soft tissue carcinoma in childhood, representing 5-8% of all malignancies in children.

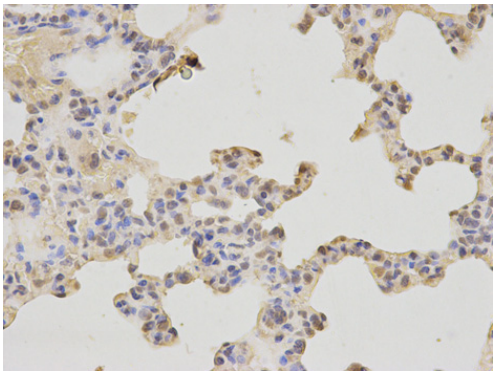
Sequence similarities

Belongs to the paired homeobox family.
Contains 1 homeobox DNA-binding domain.
Contains 1 paired domain.

Cellular localization

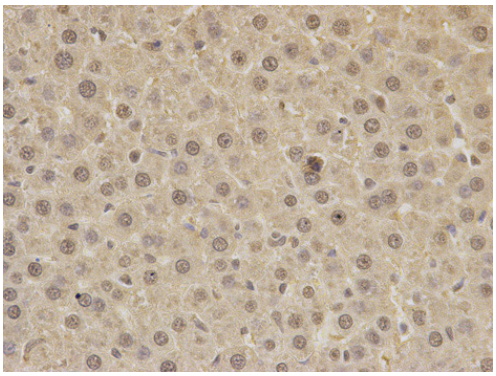
Nucleus.

Anti-PAX3 antibody images



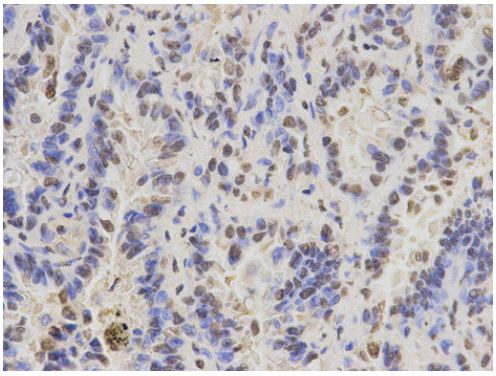
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PAX3 antibody (ab180754)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat lung tissue labelling PAX3 with ab180754 at 1/200. Magnification: 400x.



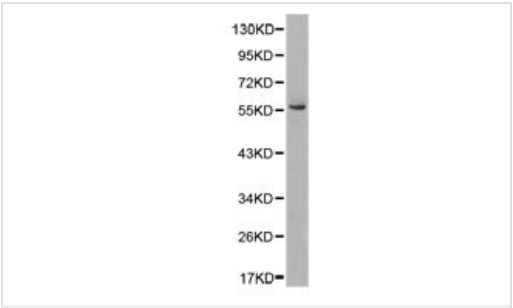
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PAX3 antibody (ab180754)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat liver tissue labelling PAX3 with ab180754 at 1/200. Magnification: 400x.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PAX3 antibody (ab180754)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human lung cancer tissue labelling PAX3 with ab180754 at 1/200. Magnification: 400x.



Western blot - Anti-PAX3 antibody (ab180754)

Anti-PAX3 antibody (ab180754) at 1/500 dilution + A431 cell lysate

Predicted band size : 23 kDa

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