




Product datasheet

Anti-PAX3 antibody ab180754

★★★★★ [1 Abreviews](#) [11 References](#) [2 Images](#)

Overview

Product name	Anti-PAX3 antibody
Description	Rabbit polyclonal to PAX3
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, ICC, IHC-P, WB
Species reactivity	Reacts with: Mouse, Rat, Human Predicted to work with: Xenopus laevis 
Immunogen	Recombinant fragment within Human PAX3 aa 300 to the C-terminus. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please contact our Scientific Support team to discuss your requirements. Database link: P23760  Run BLAST with  Run BLAST with
Positive control	WB: U-251 MG whole cell lysate; ICC: MCF-7 cells.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

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: 7.30 Preservative: 0.02% Sodium azide Constituents: 49% PBS, 50% Glycerol
Purity	Immunogen affinity purified
Clonality	Polyclonal

Applications

The Abpromise guarantee

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	★★★★★ (1)	Use at an assay dependent concentration.
ICC		1/50 - 1/200.
IHC-P		Use at an assay dependent concentration. ab171870 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/500 - 1/2000. Predicted molecular weight: 23 kDa.

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 mesenchymal 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.

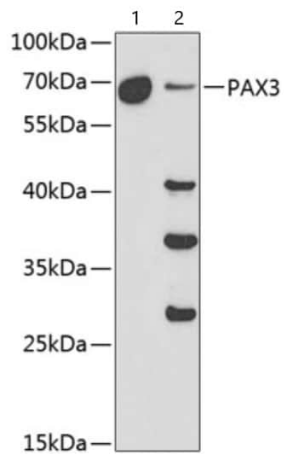
Contains 1 homeobox DNA-binding domain.

Contains 1 paired domain.

Cellular localization

Nucleus.

Images



Western blot - Anti-PAX3 antibody (ab180754)

All lanes : Anti-PAX3 antibody (ab180754) at 1/1000 dilution

Lane 1 : U-251 MG (formally U-373 MG) (human brain glioma cell line) whole cell lysate

Lane 2 : K562 (human chronic myelogenous leukemia cell line from bone marrow) whole cell lysate

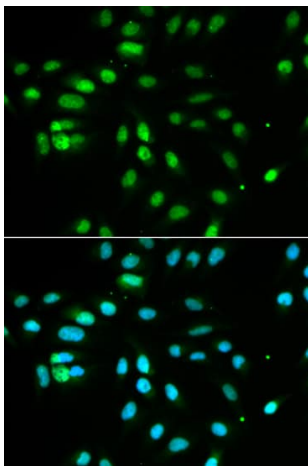
Lysates/proteins at 25 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG (H+L) (HRP) at 1/10000 dilution

Predicted band size: 23 kDa

Blocking buffer: 3% NFDM/TBST.



Immunocytochemistry - Anti-PAX3 antibody (ab180754)

Immunocytochemistry/Immunofluorescence analysis of MCF7 cells using ab180754. Blue DAPI for nuclear staining.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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