




Product datasheet

Anti-PAX3 antibody ab15717

★★★★★ [5 Abreviews](#) [7 References](#) [3 Images](#)

Overview

Product name	Anti-PAX3 antibody
Description	Goat polyclonal to PAX3
Host species	Goat
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Rat, Chicken, Dog 
Immunogen	Synthetic peptide corresponding to Human PAX3 aa 1-100 (N terminal). Database link: P23760-1  Run BLAST with  Run BLAST with
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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: Tris buffered saline, 0.5% BSA
Purity	Immunogen affinity purified
Purification notes	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab15717 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
WB		Use a concentration of 0.3 - 1 µg/ml. Predicted molecular weight: 53 kDa. 1 hour primary incubation is recommended for this product.
IHC-P	★★★★★ (2)	Use a concentration of 3 µg/ml.

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

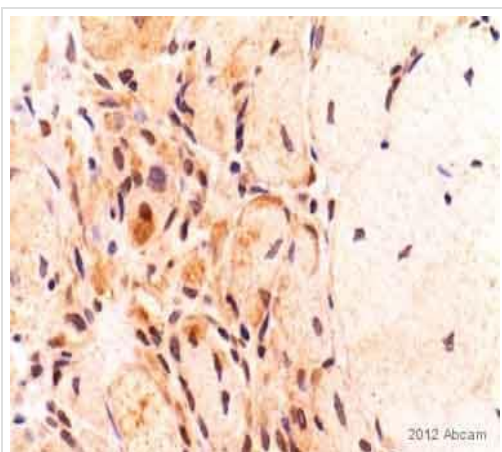
Belongs to the paired homeobox family.

Contains 1 homeobox DNA-binding domain.

Contains 1 paired domain.

Cellular localization

Nucleus.



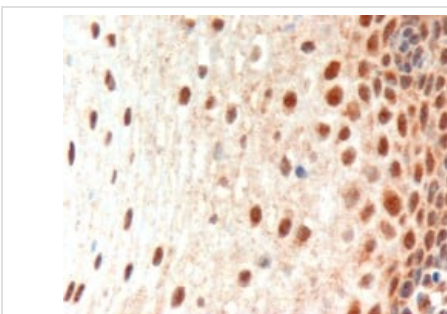
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PAX3 antibody (ab15717)

Image courtesy of an anonymous Abreview.

ab15717 staining PAX3 in murine striated muscle tissue by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections).

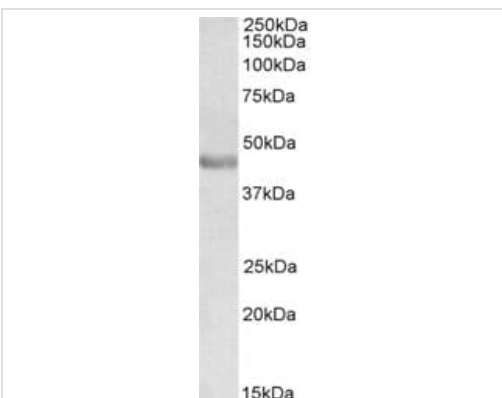
Tissue was fixed in formaldehyde and a heat mediated antigen retrieval step was performed using citrated buffer pH 6. Samples were then blocked with 1% BSA for 30 minutes at 25°C and then incubated with ab15717 at a 1/100 dilution for 18 hours at 25°C.

The secondary used was an undiluted HRP conjugated goat polyclonal.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PAX3 antibody (ab15717)

ab15717 (3µg/ml) staining of paraffin embedded Human Oesophagus. The tissue sections subjected to antigen retrieval by microwave in Tris/EDTA buffer pH 9.0. The HRP-staining procedure was used for detection.



Western blot - Anti-PAX3 antibody (ab15717)

Anti-PAX3 antibody (ab15717) at 0.3 µg/ml + Human duodenum lysate in RIPA buffer at 35 µg

Developed using the ECL technique.

Predicted band size: 53 kDa

Observed band size: 45 kDa

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