

Product datasheet

Anti-ALK-1 antibody [MM0015-8G33] ab51870

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Overview

Product name	Anti-ALK-1 antibody [MM0015-8G33]
Description	Mouse monoclonal [MM0015-8G33] to ALK-1
Host species	Mouse
Tested applications	Suitable for: IHC-P, WB, Flow Cyt
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length protein corresponding to Human ALK-1 (extracellular). Database link: P37023
Positive control	WB: Human placenta tissue lysate. IHC-P: Human placenta tissue. Flow Cyt: JEG3 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. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Constituent: PBS
Purity	Protein G purified
Clonality	Monoclonal
Clone number	MM0015-8G33
Isotype	IgG2a

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab51870 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
IHC-P		1/50.
WB		1/200 - 1/800. Predicted molecular weight: 56 kDa.
Flow Cyt		Use 1µg for 10 ⁶ cells. ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

Target

Function

On ligand binding, forms a receptor complex consisting of two type II and two type I transmembrane serine/threonine kinases. Type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and activate SMAD transcriptional regulators. Receptor for TGF-beta. May bind activin as well.

Involvement in disease

Defects in ACVRL1 are the cause of hereditary hemorrhagic telangiectasia type 2 (HHT2) [MIM:600376]; also known as Osler-Rendu-Weber syndrome 2 (ORW2). HHT2 is an autosomal dominant multisystemic vascular dysplasia, characterized by recurrent epistaxis, muco-cutaneous telangiectases, gastro-intestinal hemorrhage, and pulmonary, cerebral and hepatic arteriovenous malformations; all secondary manifestations of the underlying vascular dysplasia.

Sequence similarities

Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. TGFB receptor subfamily.

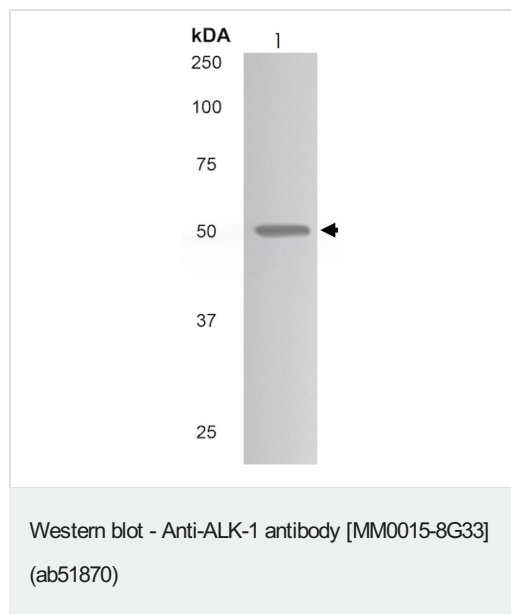
Contains 1 GS domain.

Contains 1 protein kinase domain.

Cellular localization

Membrane.

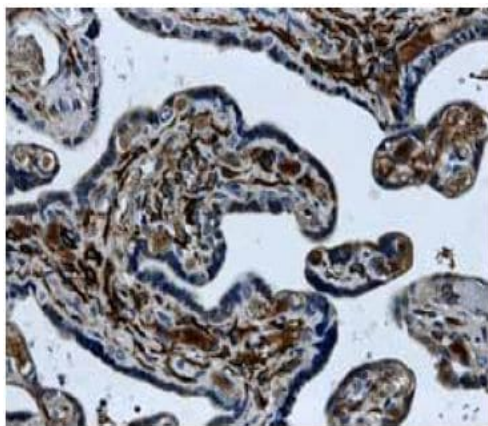
Images



Anti-ALK-1 antibody [MM0015-8G33] (ab51870) at 1/200 dilution + Human placenta tissue lysate

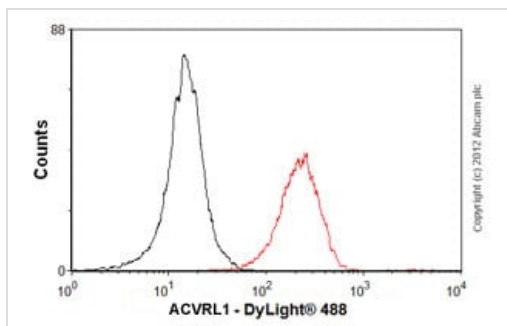
Predicted band size: 56 kDa

Observed band size: 50 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ALK-1 antibody [MM0015-8G33] (ab51870)

ab51870 at 1/50 dilution staining ALK-1 in Human placental tissue section by Immunohistochemistry (Formalin/PFA fixed paraffin-embedded sections).



Flow Cytometry - Anti-ALK-1 antibody [MM0015-8G33] (ab51870)

Overlay histogram showing JEG3 cells stained with ab51870 (red line). The cells were fixed with 80% methanol (5 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab51870, 1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2a [ICIGG2A] (**ab91361**, 1µg/1x10⁶ cells) used under the same conditions.

Acquisition of >5,000 events was performed. This antibody gave a positive signal in JEG3 cells fixed with 4% paraformaldehyde (10 min) used under the same conditions.

Please note that Abcam do not have any data for use of this antibody on non-fixed cells. We welcome any customer feedback.

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