abcam

Product datasheet

Anti-ALK-1 antibody ab68703

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製品の概要

製品名 Anti-ALK-1 antibody

製品の詳細 Rabbit polyclonal to ALK-1

由来種 Rabbit

アプリケーション 適用あり: IHC-P, IP, ICC/IF, WB

種交差性 交差種: Human

免疫原 Synthetic peptide corresponding to Human ALK-1 aa 50-150 (internal sequence) conjugated to

keyhole limpet haemocyanin. (Peptide available as **ab86637**)

ポジティブ・コントロール This antibody gave a positive signal in the following whole cell lysates: K562, MCF7.

交差が予測される動物種: Non human primates

特記事項 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.

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

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

 $80^{\circ}\text{C}\,.$ Avoid freeze / thaw cycle.

バッファー pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our

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scientific support team who will be happy to help.

精製度 Immunogen affinity purified

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ポリ/モノ ポリクローナル

アイソタイプ lgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab68703の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
IP		Use a concentration of 5 µg/ml.
ICC/IF		Use a concentration of 5 µg/ml.
WB	*** <u>*</u> (1)	Use a concentration of 1 µg/ml. Detects a band of approximately 62 kDa (predicted molecular weight: 56 kDa).

ターゲット情報

機能 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.

関連疾患 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.

配列類似性 Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. TGFB receptor

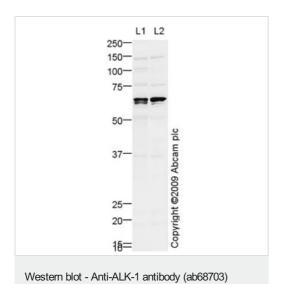
subfamily.

Contains 1 GS domain.

Contains 1 protein kinase domain.

細胞内局在 Membrane.

画像



All lanes: Anti-ALK-1 antibody (ab68703) at 1 µg/ml

Lane 1 : K562 (Human erythromyeloblastoid leukemia cell line) Whole Cell Lysate

Lane 2 : MCF7 (Human breast adenocarcinoma cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

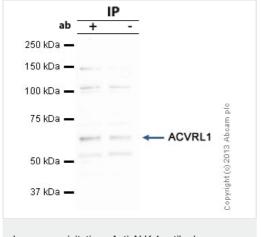
Secondary

All lanes : Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

Predicted band size: 56 kDa Observed band size: 62 kDa

ALK-1 contains a number of potential glycosylation and phosphorylation sites (SwissProt) which may explain its migration at a higher molecular weight than predicted.



Immunoprecipitation - Anti-ALK-1 antibody (ab68703)

ALK-1 was immunoprecipitated using 0.5mg K562 whole cell extract, $5\mu g$ of Rabbit polyclonal to ALK-1 and $50\mu l$ of protein G magnetic beads (+). No antibody was added to the control (-).

The antibody was incubated under agitation with Protein G beads for 10min, K562 whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of $40\mu l$ SDS loading buffer and incubated for 10min at 70°C; $10\mu l$ of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab68703.

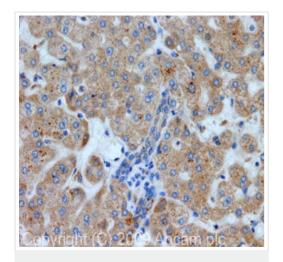
Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit IgG light chain (HRP) (ab99697).

Band: 62kDa; ALK-1, non specific - as present in control (lane 2); We are confident this was due to slight lane contamination and the band seen in the IP lane is our target of interest.



Immunocytochemistry/ Immunofluorescence - Anti-ALK-1 antibody (ab68703)

ICC/IF image of ab68703 stained HeLa cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab68703, 5μg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit lgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43μM. This antibody also gave a positive result in 100% methanol fixed (5 min) HepG2 and MCF7 cells at 5μg/ml.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ALK-1 antibody (ab68703)

IHC image of ALK-1 staining in normal human liver formalin fixed paraffin embedded tissue section, performed on a Leica Bond TM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab68703, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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