## abcam

#### Product datasheet

### Anti-ALK antibody ab74159

★★★☆☆ 1 Abreviews 画像数 1

#### 製品の概要

製品名 Anti-ALK antibody

製品の詳細 Rabbit polyclonal to ALK

由来種 Rabbit

アプリケーション **適用あり**: WB

種交差性 交差種: Human

交差が予測される動物種: Mouse 🕰

免疫原 Synthetic non-phosphopeptide derived from human ALK around the phosphorylation site of

tyrosine 1507 (P-T-Y<sup>P</sup>-G-S).

ポジティブ・コントロール LOVO cell extracts.

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 Liquic

保存方法 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

**バッファー** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride, PBS

Without Mg2+ and Ca2+

精製度 Immunogen affinity purified

**ポリ/モノ** ポリクローナル

アイソタイプ lgG

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# **The Abpromise guarantee Abpromise保証は、**次のテスト済みアプリケーションにおけるab74159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
WB	<b>★★★</b> ☆☆(1)	1/500 - 1/1000. Detects a band of approximately 176 kDa (predicted molecular weight: 176 kDa).

#### ターゲット情報

#### 機能

Neuronal receptor tyrosine kinase that is essentially and transiently expressed in specific regions of the central and peripheral nervous systems and plays an important role in the genesis and differentiation of the nervous system. Transduces signals from ligands at the cell surface, through specific activation of the mitogen-activated protein kinase (MAPK) pathway. Phosphorylates almost exclusively at the first tyrosine of the Y-x-x-Y-Y motif. Following activation by ligand, ALK induces tyrosine phosphorylation of CBL, FRS2, IRS1 and SHC1, as well as of the MAP kinases MAPK1/ERK2 and MAPK3/ERK1. Acts as a receptor for ligands pleiotrophin (PTN), a secreted growth factor, and midkine (MDK), a PTN-related factor, thus participating in PTN and MDK signal transduction. PTN-binding induces MAPK pathway activation, which is important for the anti-apoptotic signaling of PTN and regulation of cell proliferation. MDK-binding induces phosphorylation of the ALK target insulin receptor substrate (IRS1), activates mitogen-activated protein kinases (MAPKs) and Pl3-kinase, resulting also in cell proliferation induction. Drives NF-kappa-B activation, probably through IRS1 and the activation of the AKT serine/threonine kinase. Recruitment of IRS1 to activated ALK and the activation of NF-kappa-B are essential for the autocrine growth and survival signaling of MDK.

#### 組織特異性

#### 関連疾患

Expressed in brain and CNS. Also expressed in the small intestine and testis, but not in normal lymphoid cells.

A chromosomal aberration involving ALK is found in a form of non-Hodgkin lymphoma. Translocation t(2;5)(p23;q35) with NPM1. The resulting chimeric NPM1-ALK protein homodimerize and the kinase becomes constitutively activated. The constitutively active fusion proteins are responsible for 5-10% of non-Hodgkin lymphomas.

A chromosomal aberration involving ALK is associated with inflammatory myofibroblastic tumors (IMTs). Translocation t(2;11)(p23;p15) with CARS; translocation t(2;4)(p23;q21) with SEC31A. A chromosomal aberration involving ALK is associated with anaplastic large-cell lymphoma (ALCL). Translocation t(2;17)(p23;q25) with ALO17.

Neuroblastoma 3

The ALK signaling pathway plays an important role in glioblastoma, the most common malignant brain tumor of adults and one of the most lethal cancers. It regulates both glioblastoma migration and growth

A chromosomal aberration involving ALK is found in one subject with colorectal cancer. Translocation t(2;2)(p23.1;p23.3). A 5 million base pair tandem duplication generates an in-frame WDCP-ALK gene fusion.

#### 配列類似性

Belongs to the protein kinase superfamily. Tyr protein kinase family. Insulin receptor subfamily. Contains 1 LDL-receptor class A domain.

Contains 2 MAM domains.

Contains 1 protein kinase domain.

#### 翻訳後修飾

Phosphorylated at tyrosine residues by autocatalysis, which activates kinase activity. In cells not

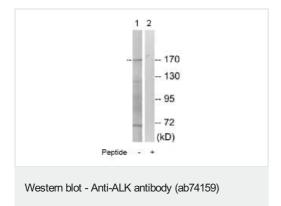
stimulated by a ligand, receptor protein tyrosine phosphatase beta and zeta complex (PTPRB/PTPRZ1) dephosphorylates ALK at the sites in ALK that are undergoing autophosphorylation through autoactivation. Phosphorylation at Tyr-1507 is critical for SHC1 association.

N-glycosylated.

#### 細胞内局在

Cell membrane. Membrane attachment was crucial for promotion of neuron-like differentiation and cell proliferation arrest through specific activation of the MAP kinase pathway.

#### 画像



All lanes: Anti-ALK antibody (ab74159) at 1/500 dilution

Lane 1: LOVO cell extracts

Lane 2: LOVO cell extracts with immunising peptide at 10 µg

Lysates/proteins at 30 µg per lane.

**Predicted band size:** 176 kDa **Observed band size:** 176 kDa

Additional bands at: 125 kDa, 70 kDa. We are unsure as to the

identity of these extra bands.

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

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