


### Anti-ALK antibody ab74159

★★★★★ [1 Abreviews](#) [1 图像](#)

#### 概述

产品名称	Anti-ALK抗体
描述	兔多克隆抗体to ALK
宿主	Rabbit
经测试应用	适用于: WB
种属反应性	与反应: Human 预测可用于: 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).
阳性对照	LOVO cell extracts.
常规说明	<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&amp;As</p>

#### 性能

形式	Liquid
存放说明	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
存储溶液	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride, PBS
纯度	Without Mg <sup>2+</sup> and Ca <sup>2+</sup> Immunogen affinity purified
克隆	多克隆
同种型	IgG

## 应用

### The Abpromise guarantee

**Abpromise™** 承诺保证使用ab74159于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★★★ (1)	1/500 - 1/1000. Detects a band of approximately 176 kDa (predicted molecular weight: 176 kDa).

## 靶标

### 功能

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-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 PI3-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.

### 组织特异性

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

### 疾病相关

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.

### 序列相似性

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.

### 翻译后修饰

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

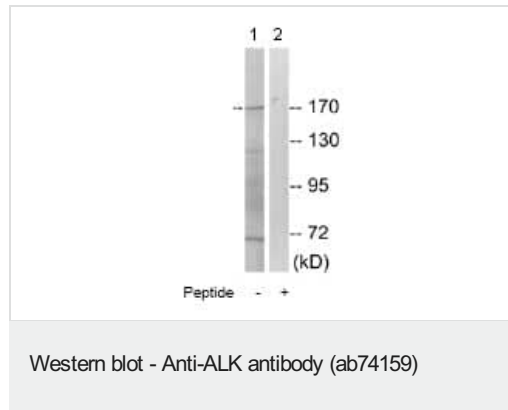
stimulated by a ligand, receptor protein tyrosine phosphatase beta and zeta complex (PTPRB/PTPRZ1) dephosphorylates ALK at the sites in ALK that are undergoing autophosphorylation through autoactivation. Phosphorylation at Tyr-1507 is critical for SHC1 association.

N-glycosylated.

#### 细胞定位

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

#### 图片



**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"

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.cn/abpromise> or contact our technical team.

#### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors