

#### OriGene Technologies, Inc.

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# Product datasheet for CF801287

## ALK Mouse Monoclonal Antibody [Clone ID: OTI1A4]

## **Product data:**

Product Type:	Primary Antibodies
Clone Name:	OTI1A4
Applications:	IHC, LMNX, WB
Recommended Dilution:	WB 1:2000
Reactivity:	Human
Host:	Mouse
lsotype:	lgG2b
Clonality:	Monoclonal
Immunogen:	Human recombinant protein fragment corresponding to amino acids 1300-1620 of human ALK (NP_004295) produced in E.coli.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	176.3 kDa
Gene Name:	ALK receptor tyrosine kinase
Database Link:	<u>NP_004295</u> <u>Entrez Gene 238 Human</u> <u>Q9UM73</u>



#### **GRIGENE** ALK Mouse Monoclonal Antibody [Clone ID: OTI1A4] – CF801287

Background:This gene encodes a receptor tyrosine kinase, which belongs to the insulin receptor<br/>superfamily. This protein comprises an extracellular domain, an hydrophobic stretch<br/>corresponding to a single pass transmembrane region, and an intracellular kinase domain. It<br/>plays an important role in the development of the brain and exerts its effects on specific<br/>neurons in the nervous system. This gene has been found to be rearranged, mutated, or<br/>amplified in a series of tumours including anaplastic large cell lymphomas, neuroblastoma,<br/>and non-small cell lung cancer. The chromosomal rearrangements are the most common<br/>genetic alterations in this gene, which result in creation of multiple fusion genes in<br/>tumourigenesis, including ALK (chromosome 2)/EML4 (chromosome 3), ALK/RANBP2<br/>(chromosome 5), ALK/SQSTM1 (chromosome 5), ALK/KIF5B (chromosome 10), ALK/CLTC<br/>(chromosome 17), ALK/TPM4 (chromosome 19), and ALK/MSN (chromosome X). [provided by<br/>RefSeq, Jan 2011]

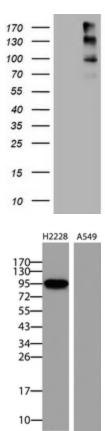
Synonyms:

CD246; NBLST3

Protein Families:

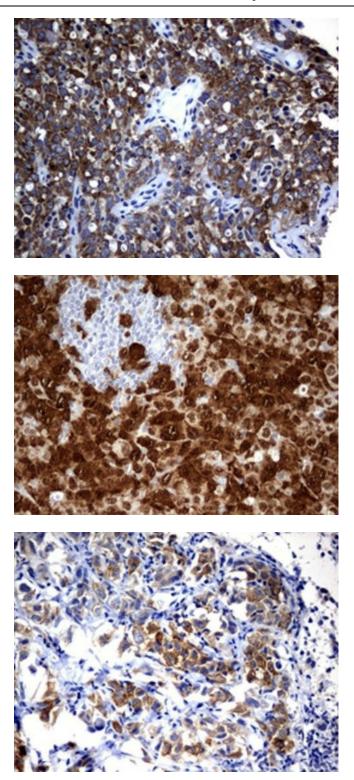
### Druggable Genome, Protein Kinase

#### **Product images:**



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ALK ([RC222485], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ALK. Positive lysates [LY418072] (100ug) and [LC418072] (20ug) can be purchased separately from OriGene.

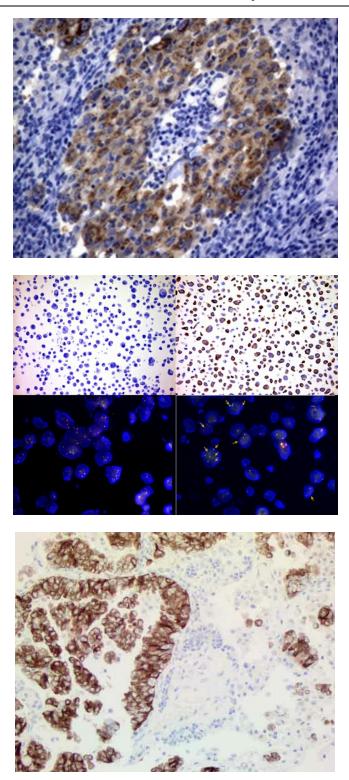
Western blot analysis of extracts (35ug) from H2228 and A549 cell lines by using anti-ALK monoclonal antibody. ([TA801287], 1:10,000)



Immunohistochemical staining of paraffinembedded Human non-small cell lung cancer sample with ALK translocation detected by FISH using anti-ALK mouse monoclonal antibody. ([TA801287], 1:50; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.0, 120°C for 3min). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

Immunohistochemical staining of paraffinembedded Human large B cell lymphoma with ALK translocation using anti-ALK mouse monoclonal antibody. ([TA801287], 1:50; heatinduced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.0, 120°C for 3min). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

Immunohistochemical staining of paraffinembedded ALK-positive lung tumor xenograft using anti-ALK mouse monoclonal antibody. ([TA801287], 1:50; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.0, 120°C for 3min). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffinembedded Human non-small cell lung cancer sample with EML4-ALK translocation detected by PCR using anti-ALK mouse monoclonal antibody. ([TA801287], 1:50; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.0, 120°C for 3min). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

Immunohistochemistry staining of paraffinembedded human cell line H1975 (upper left) and H2228 (upper right) on IHC antibody quality control slide using anti-ALK mouse monoclonal antibody [TA801287] (1:400). The ALK rearrangement in H2228 cells is labeled with ALK Breakapart probe in FISH test (lower right, 60X) and the control of H1975 cell at the same FISH probe test (lower left, 60X). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

Immunohistochemical staining of paraffinembedded human ALK-positive lung cancer tissue using anti-ALK mouse monoclonal antibody. ([TA801287], 1:100 for 30 min at RT; heat-induced epitope retrieval by TEE, pH9.0). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

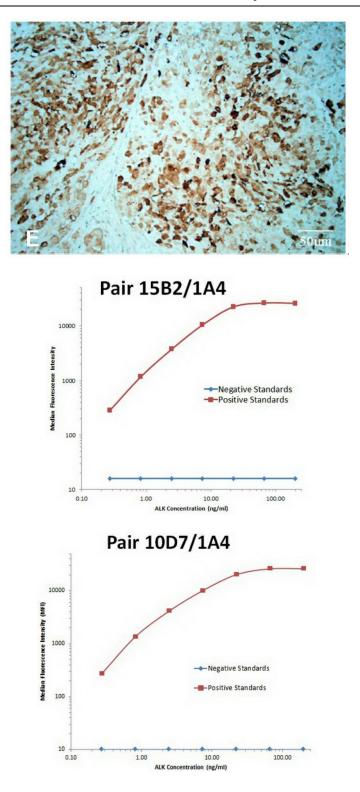


Figure from citation: Immunohistochemistry of ALK protein level by using anti-ALK antibody in human right cervical lymph node. Dilution: 1:200 <u>View Citation</u>. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

ALK Luminex with 15B2 Capture ([TA801288]) and 1A4 Detection ([TA801287]) Antibodies. Substrate used: full length HEK293 cells expressed recombinant ALK protein ([TP322485]).

ALK Luminex with 10D7 Capture ([TA801306]) and 1A4 Detection ([TA801287]) Antibodies. Substrate used: full length HEK293 cells expressed recombinant ALK protein ([TP322485]).