

Active Recombinant Human ALK, GST-tagged

Cat. No. ALK-08H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human ALK, fused with GST-tag, was expressed in Baculovirus infected Sf21 cells.
Species	Human
Source	Sf21 Cells
ProteinLength	1-1059aa
Description	This gene encodes a receptor tyrosine kinase, which belongs to the insulin receptor superfamily. This protein comprises an extracellular domain, an hydrophobic stretch corresponding to a single pass transmembrane region, and an intracellular kinase domain. It plays an important role in the development of the brain and exerts its effects on specific neurons in the nervous system. This gene has been found to be rearranged, mutated, or amplified in a series of tumours including anaplastic large cell lymphomas, neuroblastoma, and non-small cell lung cancer. The chromosomal rearrangements are the most common genetic alterations in this gene, which result in creation of multiple fusion genes in tumourigenesis, including ALK (chromosome 2)/EML4 (chromosome 2), ALK/RANBP2 (chromosome 2), ALK/ATIC (chromosome 2), ALK/TFG (chromosome 3), ALK/NPM1 (chromosome 5), ALK/SQSTM1 (chromosome 5), ALK/KIF5B (chromosome 10), ALK/CLTC (chromosome 17), ALK/TPM4 (chromosome 19), and ALK/MSN (chromosome X).
Form	Liquid.

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Bio-activity	The activity was measured by off-chip mobility shift assay. The enzyme was incubated with fluorescence-labeled substrate and Mg (or Mn)/ATP. The phosphorylated and unphosphorylated substrates were separated and detected by LabChip™3000. Substrate : Src tide. ATP: 100 μ M.
Molecular Mass	145 kDa
Purity	64 % by SDS-PAGE/CBB staining.
Applications	Functional Study; SDS-PAGE
Storage	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.05% Brij35, 1 mM DTT, 10% glycerol)
GENE INFORMATION	
Gene Name	ALK anaplastic lymphoma receptor tyrosine kinase [Homo sapiens (human)]
Official Symbol	ALK
Synonyms	ALK; CD246; NBLST3; anaplastic lymphoma receptor tyrosine kinase; ALK tyrosine kinase receptor; CD246 antigen; mutant anaplastic lymphoma kinase; NP_004295.2; EC 2.7.10.1
Gene ID	238
mRNA Refseq	NM_004304
Protein Refseq	NP_004295

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MIM	105590
UniProt ID	Q9UM73
Chromosome Location	2p23
Pathway	Non-small cell lung cancer
Function	ATP binding; NF-kappaB-inducing kinase activity; protein binding

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