

Product datasheet for **TP521949**

Alk (NM_007439) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse anaplastic lymphoma kinase (Alk), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T



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Expression cDNA >MR221949 representing NM_007439
Clone or AA Red=Cloning site Green=Tags(s)
Sequence:

MGAAGFLWLLPPLLLAAASYGAATDQRAGSPASGPPLQPREPLSYSRLQRKSLAVDFVWPSLFRVYARD
LLLPQPRSPSEPEAGGLEARGSLALDCEPLLRLGGLPGISWADGASSPSPEAGPTLSRVLKGGSVRKLR
RAKQLVLELGEETILEGCIGPPEEVAAVGILQFNLSLFSWWILHGEGRRLRIRLMPEKKASEVREGRLS
SAIRASQPRLLFQIFGTGHSSMESPSSETPSPPGTFMWNLTWTMKDSFPFLSHRSRYGLECSFDFPCELEY
SPPLHNHGNQSWSWRHPVSEEARSMNLLDGPAAEHSQEMPRGSFLLNNTSADSKHTILSPWMRSSSDHCT
LAVSVHRHLQPSGRYVAQLLPHNEAGREILLVPTPGKHGWTVLQGRVGRPANPFRVALEYISSGNRSLSA
VDFALKNCSEGTSPGSKMALQSSFTCWNGTVLQLGQACDFHQDCAQGEDEGQLCSKLPAGFYCNFENG
CGWTQSPSPHMPRWQVRTLDAHSQGHQGRALLLSTTDILASEGATVTSATFPAPMKNSPCELMSWLI
RGVLRGNVSLVLENKTGKEQSRVWHVATDEGLSLWQHTVLSLLDVTDRFWLQIVTWWGPGSRATVGF
NISISLDCYLTISGEEKMSLNSVPKSRNLFEKNPNKESKSWANISGPTPIFDPTVHWLFTTCGASGPHGP
TQAQCNNAYQNSNLSVVGSEGPLKGVQIWKVPATDTYSISGYGAAGGKGGKNTMMRSHGVSVLGIFNLE
KGDTLIYLVGQQGEDACPRANQLIQKVCVGENNVIEEIRVNRVHEWAGGGGGGGGATYVFKMKDGPV
PLIIAAGGGGRAYGAKTETFHPERLESNSSVLGLNNGNSGAAGGGGGWNDNTSLLWAGKSLLEGAAGGHSC
PQAMKKWGWETRGGFGGGGGGGCSSGGGGGGYIGGNAASNNDPEMDGEDGVSFISPLGILYTPALKVMEGH
GEVNIKHLYNCSHCEVDECHMDPESHKVICFCDHGTVLADDGVSCIVSPTPEPHLPLSLISVVTALVA
ALVLAFGIMIVYRRKHQELQAMQMEQLSPEYKLSKLRSTIMTDYNPNYCFAGKTSSISDLKEVPRKNI
TLIRGLGHGAFGEVYEQVSGMPNDPSPLQVAVKTLPEVCSEQDELDFLMEALIISKFNHQNIVRCIGVS
LQALPRFILLELMAGGDLKSFLRETRPRPNQPTSLAMLDLLHVARDIACGCQYLEENHFIHRDIAARNCL
LTCPGAGRIAKIGDFGMARDIYRASYRKGCCAMLPVKWMPPEAFMEGIFTSKTDTSWFGVLLWEIFSLG
YMPYPSKSNQEVLEFVTSGGRMDDPPKNCPPVYRIMTQCWQHQPEDRPNFAILERIEYCTQDPDVINTA
LPIEYGPVVEEEEKVPMPKDPGMPPLLVSPPAKHEEASAAPQPAALTAPGPSVKKPPGAGAGAGAGA
GAGVPVPRGAADRGHVNMAFSQPNPPPELHKGPGSRNKPTSLWNPTYGWSFTEKPAKKTHTPPGAEPQARA
GAAEGGWTGPGAGPRRAEAALLLEPSALSATMKEVPLFRLRHFPCCGNVNYGYQQQLPLEATAAPGDTML
KSKNKVTQPGP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK
Predicted MW: 175.4 kDa
Concentration: >0.05 µg/µL as determined by microplate BCA method
Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note: For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage: Store at -80°C after receiving vials.
Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq: [NP_031465](#)

Locus ID: 11682

UniProt ID: [P97793](#)

RefSeq Size: 5918

Cytogenetics: 17 43.77 cM

RefSeq ORF: 4863

Synonyms: CD246; Tcrz

Summary: 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.[UniProtKB/Swiss-Prot Function]