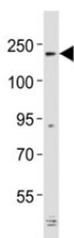


## Alk Antibody (F53252)

| Catalog No.   | Formulation                                | Size    |
|---------------|--|---------|
| F53252-0.4ML  | In 1X PBS, pH 7.4, with 0.09% sodium azide | 0.4 ml  |
| F53252-0.08ML | In 1X PBS, pH 7.4, with 0.09% sodium azide | 0.08 ml |

### Bulk quote request

|                           |   |
|---------------------------|---|
| <b>Availability</b>       | 1-3 business days                                     |
| <b>Species Reactivity</b> | Mouse   |
| <b>Format</b>             | Antigen affinity purified                             |
| <b>Host</b>               | Rabbit  |
| <b>Clonality</b>          | Polyclonal (rabbit origin)                            |
| <b>Isotype</b>            | Rabbit Ig   |
| <b>Purity</b>             | Antigen affinity                                      |
| <b>UniProt</b>            | P97793  |
| <b>Applications</b>       | Western Blot : 1:2000                                 |
| <b>Limitations</b>        | This Alk antibody is available for research use only. |



Western blot testing of Alk antibody at 1:2000 dilution + mouse cerebellum lysate;  
Predicted molecular weight: 190-220 kDa.

## Description

Anaplastic lymphoma kinase is a neuronal orphan 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. [UniProt]

## Application Notes

Titration of the Alk antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

This Alk antibody was produced from a rabbit immunized with a KLH conjugated synthetic peptide between 1517-1550 amino acids mouse Alk.

## Storage

Aliquot the Alk antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.