

## Product datasheet for **TP322485L**

### **ALK (NM\_004304) Human Recombinant Protein**

#### **Product data:**

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human anaplastic lymphoma receptor tyrosine kinase (ALK), 1 mg

**Species:** Human

**Expression Host:** HEK293T



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**Expression cDNA** >RC222485 representing NM\_004304  
**Clone or AA** **Red**=Cloning site **Green**=Tags(s)  
**Sequence:**

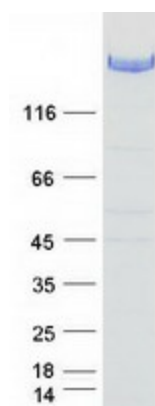
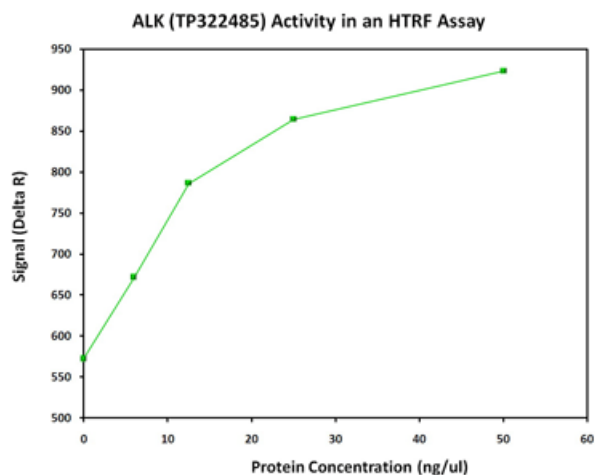
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**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Tag:** C-Myc/DDK  
**Predicted MW:** 176.3 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

|                          |  |
|--------------------------|--|
| <b>Bioactivity:</b>      | ALK activity verified in a biochemical assay: <b>ALK (anaplastic lymphoma receptor tyrosine kinase)</b> (TP322485) activity was measured in a homogeneous time-resolved fluorescent (HTRF®) assay. ALK is an orphan receptor protein-tyrosine kinase having a putative transmembrane domain and an extracellular domain. Varying concentrations of ALK were added to a reaction mix containing ATP and a biotinylated kinase substrate and the reaction mixture was incubated to allow the protein to phosphorylate the substrate. HTRF detection reagents were then added, and the time-resolved fluorescent signal was measured on a Flexstation 3 microplate reader. The time resolved fluorescent signal is expressed as “delta R” or “ΔR” and is a ratio calculated from the fluorescent emission intensities of the donor and acceptor fluors.   |
| <b>Preparation:</b>      | Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.   |
| <b>Note:</b>             | For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.   |
| <b>Storage:</b>          | Store at -80°C.  |
| <b>Stability:</b>        | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.  |
| <b>RefSeq:</b>           | <a href="#">NP_004295</a>  |
| <b>Locus ID:</b>         | 238  |
| <b>UniProt ID:</b>       | <a href="#">Q9UM73</a> , <a href="#">B6D4Y2</a>  |
| <b>RefSeq Size:</b>      | 6222   |
| <b>Cytogenetics:</b>     | 2p23.2-p23.1   |
| <b>RefSeq ORF:</b>       | 4860   |
| <b>Synonyms:</b>         | CD246; NBLST3  |
| <b>Summary:</b>          | 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).[provided by RefSeq, Jan 2011] |
| <b>Protein Families:</b> | Druggable Genome, Protein Kinase   |

## Product images:



Coomassie blue staining of purified ALK protein (Cat# [TP322485]). The protein was produced from HEK293T cells transfected with ALK cDNA clone (Cat# [RC222485]) using MegaTran 2.0 (Cat# [TT210002]).