For Research Use Only

Recombinant Mouse CD246/Alk protein (rFc Tag)

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Catalog Number: Eg6308

Basic Information

Species:
Mouse

Purity:
>90 %, SDS-PAGE

Tag:
rFc Tag

Technical Specifications

Purity:
>90 %, SDS-PAGE

Endotoxin Level:
<0.1 EU/ μ g protein, LAL method

Source:
HEK293-derived Mouse CD246 protein Ser19-Ser1042 (Accession# P97793) with a rabbit IgG Fc tag at the C-terminus.

GeneID:
11682

Accession:
P97793

Predicted Molecular Mass:
135.7 kDa

SDS-PAGE:
140-200 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20℃ to -80℃ as lyophilized proteins.
- 3 months, -20℃ to -80℃ under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

CD246/ALK (Anaplastic Lymphoma Kinase) is a receptor tyrosine kinase belonging to the insulin receptor superfamily, playing a dual role in neural development and tumorigenesis. Under normal physiological conditions, ALK is mainly expressed in the central nervous system, where it participates in neuronal differentiation, axon guidance, and the regulation of synaptic plasticity. In tumors, ALK gene rearrangements (e.g., EML4-ALK) represent a key driver mutation in non-small cell lung cancer (NSCLC) and a hallmark genetic alteration in anaplastic large cell lymphoma (ALCL), leading to constitutive kinase activation and aberrant activation of downstream signaling pathways such as PI3K/AKT, RAS/MAPK, and JAK/STAT, thereby promoting malignant proliferation and survival of tumor cells. ALK inhibitors (e.g., crizotinib, alectinib) have become the standard of care for precision therapy in ALK-positive tumors.

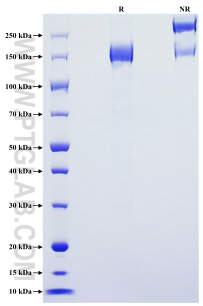
References

1.Iwahara, T et al. Oncogene vol. 14,4 (1997): 439-49.
2.Gupta, Somnath J et al. Neuroscience insights vol. 18 (2023): 26331055231186993.
3.Šutić, Maja et al. Journal of personalized medicine vol. 11,11 (2021): 1102.
4.Uemura, Takehiro, and Toyoaki Hida. Annals of translational medicine vol. 5,21 (2017): 433.

Synonyms

Alk , ALK tyrosine kinase receptor , Anaplastic lymphoma kinase , CD246

Selected Validation Data



Purity of Recombinant Mouse CD246 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.