

## DESCRIPTION

|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Human   |
| <b>Specificity</b>        | Detects human ALK/CD246 in direct ELISAs.   |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2A</sub> Clone # 383603   |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant  |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human ALK/CD246 Val19-Ser1038<br>Accession # Q0UM73   |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. |

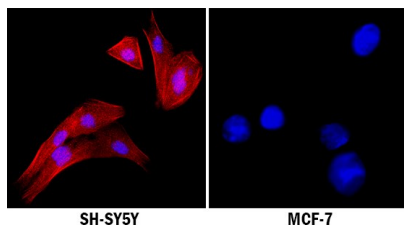
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

|                            | <b>Recommended Concentration</b> | <b>Sample</b> |
|----------------------------|----------------------------------|---------------|
| <b>Immunocytochemistry</b> | 8-25 µg/mL                       | See Below     |

## DATA

### Immunocytochemistry



**ALK/CD246 in SH-SY5Y Human Cell Line.** ALK/CD246 was detected in immersion fixed SH-SY5Y human neuroblastoma cell line (left panel; positive staining) and MCF-7 human breast cancer cell line (right panel; negative staining) using Mouse Anti-Human ALK/CD246 Monoclonal Antibody (Catalog # MAB42101) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to plasma membrane and cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

## PREPARATION AND STORAGE

|                                |  |
|--------------------------------|--|
| <b>Reconstitution</b>          | Reconstitute at 0.5 mg/mL in sterile PBS.  |
| <b>Shipping</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C   |
| <b>Stability &amp; Storage</b> | <b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul> |

## BACKGROUND

Anaplastic Lymphoma Kinase (ALK), also known as CD246, is a 220 kDa transmembrane glycoprotein that is primarily expressed in the developing nervous system. ALK contains one LDLR class A domain, two MAM domains, and a cytoplasmic kinase domain. Chromosomal translocation involving ALK and the nucleolar NPM protein result in a cytoplasmic fusion protein that exists as a dimer. The kinase domain in NPM-ALK is constitutively active and participates in cellular transformation. ALK translocations are found in a variety of tumors. Within the extracellular domain, human and mouse ALK share 88% amino acid sequence identity.