

Human/Mouse TGF-β RI/ALK-5 Antibody

Recombinant Monoclonal Rat IgG_{2A} Clone # 141231R Catalog Number: MAB5871R

| DESCRIPTION | | | |
|--------------------|---|--|--|
| Species Reactivity | Human/Mouse | | |
| Specificity | Detects mouse TGF-β RI/ALK-5 in direct ELISAs. | | |
| Source | Recombinant Monoclonal Rat IgG _{2A} Clone # 141231R | | |
| Purification | Protein A or G purified from cell culture supernatant | | |
| Immunogen | S. <i>frugiperda</i> insect ovarian cell line <i>Sf 21</i> -derived recombinant mouse TGF-β RI/ALK-5 Ala21-Glu121 Accession # BAA05023 | | |
| Formulation | on Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *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. | | | | |
|---|------------------------------|---|--|--|
| | Recommended Concentration | Sample | | |
| Western Blot | 1 µg/mL | Recombinant Human TGF- β RI/ALK-5 Fc Chimera (Catalog # 3025-BR) and Recombinant Mouse TGF- β RI/ALK-5 Fc Chimera (Catalog # 587-RI) | | |

| PREPARATION AND STORAGE | | |
|-------------------------|--|--|
| Reconstitution | Reconstitute at 0.5 mg/mL in sterile PBS. | |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C | |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution. | |

BACKGROUND

Most cell types express three sizes of receptors for TGF- β . These are designated Type I (53 kDa), Type II (70-85 kDa), and Type III (250-350 kDa). The Type III receptor, a proteoglycan that exists in membrane-bound and soluble forms, binds TGF- β 1, TGF- β 2, and TGF- β 3 but does not appear to be involved in signal transduction. The Type II receptor is a membrane-bound serine/threonine kinase that binds TGF- β 1 and TGF- β 3 with high affinity and TGF- β 2 with a much lower affinity. The Type I receptor, originally known as ALK-5 (Activin receptor-like kinase) is also a membrane-bound serine/threonine kinase that apparently requires the presence of the Type II receptor to bind TGF- β . Current evidence suggests that signal transduction requires the cytoplasmic domains of both the Type I and Type II receptors.

References:

1. Miyazono, K. et al. (1994) Adv. In Immunol. 55:181.

2. Massagùe, J. (1998) Ann. Rev. Biochem. 67:753.

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