

DESCRIPTION

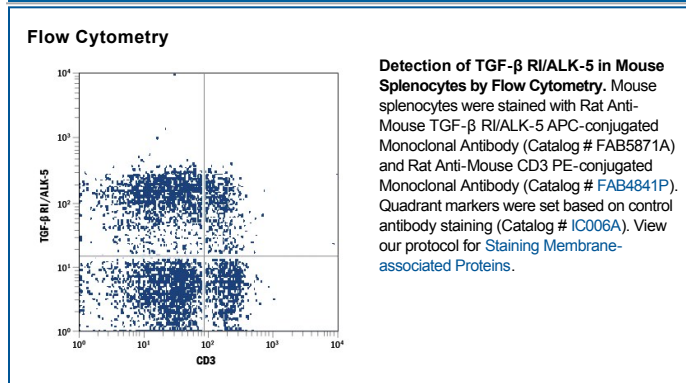
Species Reactivity	Mouse
Specificity	Detect mouse TGF- β RI/ALK-5 in flow cytometry. Although this clone detects human and mouse TGF- β RI/ALK-5 in Western blots, positive results have not been observed on human TGF- β RI/ALK-5 in flow cytometry. In direct ELISAs and Western blots, this antibody shows no cross-reactivity with rrMIS RII, rhTGF- β RII, rhTGF- β RIIB, or rhTGF- β RIII.
Source	Monoclonal Rat IgG _{2A} Clone # 141231
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant mouse TGF- β RI/ALK-5 Ala21-Glu121 Accession # BAA05023
Conjugate	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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
Flow Cytometry	10 μ L/10 ⁶ cells	See Below

DATA



PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage **Protect from light. Do not freeze.**

- 12 months from date of receipt, 2 to 8 °C as supplied.

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. Massagué, J. (1998) *Ann. Rev. Biochem.* **67**:753.