

DESCRIPTION

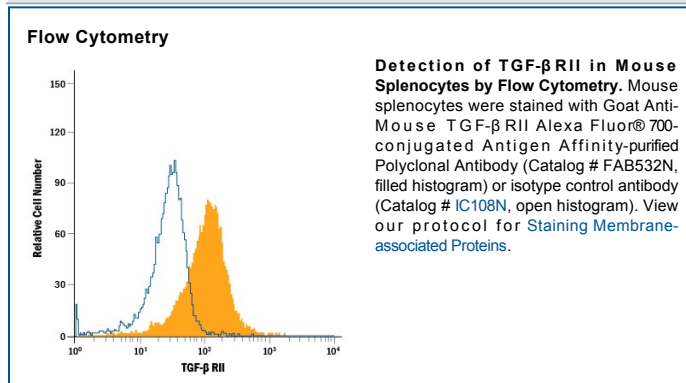
Species Reactivity	Mouse
Specificity	Detects mouse TGF-β RII in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human (rh) TGF-β RII is observed and less than 1% cross-reactivity with recombinant mouse TGF-β RI and rhTGF-β RIII is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse TGF-β RII and <i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant mouse TGF-β RII Ile24-Asp184 Accession # Q62312
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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	5 μL/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. <ul style="list-style-type: none"> 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-β1, TGF-β2, and TGF-β3 but does not appear to be involved in signal transduction. The Type II receptor is a membrane-bound serine/threonine kinase that binds TGF-β1 and TGF-β3 with high affinity and TGF-β2 with a much lower affinity. The Type I receptor 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.

The recombinant soluble TGF-β Type II receptor is capable of binding TGF-β1, TGF-β3, and TGF-β5 with sufficient affinity to act as an inhibitor of these isoforms at high concentrations. The soluble receptor also binds TGF-β2, but with an affinity at least two orders of magnitude lower. Binding of TGF-β1, TGF-β3, and TGF-β5 to the soluble TGF-β Type II receptor can also be demonstrated by using the soluble receptor as a capture agent on ELISA plates and this observation has been used as the basis for the development of immunoassays for these isoforms of TGF-β.

References:

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

PRODUCT SPECIFIC NOTICES

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