

10-3533: Monoclonal Antibody to mouse TNF-RI-FITC Conjugated(Discontinued)

Clonality :	Monoclonal
Clone Name :	55R-170
Application :	IP,FACS
Reactivity :	Mouse
Conjugate :	FITC
Gene :	Tnfrsf1a
Gene ID :	21937
Uniprot ID :	P25118
Alternative Name :	Tnfr-1, TNFR1, p55, p60, CD120a, Tumor necrosis factor receptor 1
Isotype :	Armenian hamster IgG
Immunogen Information :	Purified soluble extracellular domain of mouse TNF-RI

Description

The monoclonal antibody 55R-170 recognizes the extracellular part of mouse Tumor Necrosis Factor Receptor superfamily member 1A (TNF-RI), also known as CD120a or p55. TNF-RI belongs to the large TNF receptor family, among which TNF-RII (TNF-R p75-80), lymphotoxin-beta receptor (LTbetaR) and the Herpes virus entry mediator (HVEM). Ligands for these receptors belong to the Tumor Necrosis Factor (TNF) superfamily of cytokines, which activate signaling pathways for cell survival, death, and differentiation that orchestrate the development, organization and homeostasis of lymphoid, mammary, neuronal and ectodermal tissues. TNF-RI contains a characteristic structural cassette termed death domain in its sequence that is conserved within a distinct subset of other TNF-R family members, such as CD95, DR3, DR4, and DR5. This death domain, was characterized as being essential for induction of apoptosis in vitro and has been structurally conserved within these TNF-R superfamily members. Deletion of the death domain of the TNF-RI results in a non-functional receptor, indicating that the death domain is required for the signal transduction of the physiological functions of TNF-RI in vivo. TNF-RI is a 55 kD type I transmembrane protein and is expressed on a variety of cell types at low levels. It is considered to play a prominent role in cell stimulation by TNF-alpha. Induction of cytotoxicity and other functions are mediated largely via TNF-RI. TNF-RI is present as soluble form in body fluids (for instance plasma and CSF). This extracellular TNF-RI is generated by two mechanisms, namely proteolytic cleavage of TNF-RI ectodomains and release of full-length TNF-RI in the membranes of exosome-like vesicles. TNF-RI and TNF-RII both interact with the homomeric forms of LTbeta or TNF. However, TNF-RI functions as the high affinity receptor for soluble TNF (sTNF). TNF-RI has been shown to be involved in a wide variety of inflammatory diseases, among which neurodegenerative diseases (Parkinson's and Alzheimer's disease), multiple sclerosis, asthma, atherosclerosis, rheumatology. The monoclonal antibody 55R-170 also recognizes the soluble receptor.

Product Info

Amount :	FITC Conjugated(Discontinued) / 500 µg
Content :	0.5 mg, 0.2 µm protein G purified FITC conjugated antibody solution in PBS, containing 1% bovine serum albumin and 0.02% sodium azide.
Storage condition :	Product should be stored at 4 °C. Under recommended storage conditions, product is stable for at least one year.

Application Note

Functional Studies: Antibody 55R-170 is an antagonistic antibody useful for blocking of TNF-RI. Immuno Assay: Antibody 55R-170 can be used as a detection antibody. Dilutions to be used depend on detection system applied. It is recommended

that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.