

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse TWEAK/TNFSF12 in ELISAs. In sandwich ELISAs, approximately 5% cross-reactivity with recombinant human TWEAK is observed and no cross-reactivity with recombinant mouse (rm) BAFF, rmFas Ligand, rmOX40, or rmTNF-α is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 189803
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse TWEAK/TNFSF12 Arg105-His249 Accession # O54907.2
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.

ELISA Capture (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
ELISA Detection (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.

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

TNF-related weak inducer of apoptosis (TWEAK) is a type II transmembrane protein belonging to the TNF superfamily and has been designated TNFSF12. Mouse TWEAK is a 249 amino acid (aa) protein with an N-terminal 21 aa cytoplasmic domain, a 21 aa transmembrane region and a 204 aa C-terminal extracellular domain (1). Human and mouse TWEAK share 88% amino acid sequence identity within the extracellular domain. A soluble form of TWEAK is generated from the membrane-associated molecules by proteolytic cleavage suggesting that TWEAK may have long-range effects. TWEAK is expressed widely in many tissues and cells (1). Although TWEAK has been proposed as a ligand that signals through the death domain receptor 3 (DR3) (2), a TNF receptor superfamily member currently designated TNFRSF25, subsequent studies did not demonstrate binding of TWEAK to cell lines that express DR3 (3). In cells that lack DR3, TWEAK has been shown to bind TWEAK receptor (TWEAK R), a novel TNF receptor superfamily member designated TNFRSF12A (4-7). TWEAK R, also known as fibroblast growth factor-inducible 14 (Fn14), is a growth factor-inducible immediate-early response gene that is expressed in fibroblasts, hepatocellular carcinomas and endothelial cells. TWEAK-TWEAK R interaction has been shown to promote NF-κB activation and mediate multiple cell death pathways. On endothelial cells, TWEAK R plays a role in endothelial cell growth and migration. This effect of TWEAK is not due to upregulation of VEGF (8).

PRODUCT SPECIFIC NOTICES

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