

#### DESCRIPTION

|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Mouse   |
| <b>Specificity</b>        | 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.                               |
| <b>Source</b>             | Monoclonal Rat IgG <sub>2A</sub> Clone # 189803   |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant mouse TWEAK/TNFSF12<br>Arg105-His249<br>Accession # O54907.2  |
| <b>Conjugate</b>          | Alexa Fluor 594<br>Excitation Wavelength: 590 nm<br>Emission Wavelength: 617 nm   |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.