

Tel: 888.999.1371 or 858.642.2058

Fax: 858.642.2046

Web: www.ebioscience.com E-mail: info@ebioscience.com

### **Product Information**

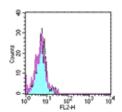
Contents: Biotin anti-mouse TWEAK Catalog Number: 13-9913 Sizes: 50 ug, 100 ug, 500 ug

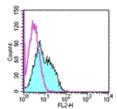
Formulation: Phosphate buffer pH 7.2,

150 mM NaCl, 0.09% NaN<sub>3</sub>

Storage Conditions: Store at 4°C.

DO NOT FREEZE. Clone: MTW-1 I sotype: Rat IgG1, κ





Staining of non-transfected (left) and TWEAK transfected (right) L5178Y cells with 0.125 µg of biotin rat IgG1 isotype control (cat.13-4301) (open histogram) or 0.03 µg of biotin MTW-1 (colored histogram) followed by SAV-PE (cat.12-4312). Total viable cells were used for analysis.

Formats of This Product			
Format	Excite (nm)	Emit (nm)	Reported Applications
PE anti-mouse TWEAK	488	575	FC
Biotin anti-mouse TWEAK	N/A	N/A	FC
Affinity Purified anti-mouse TWEAK	N/A	N/A	FC
Functional Grade* Purified anti-mouse TWEAK	N/A	N/A	FC
	Format  PE anti-mouse TWEAK  Biotin anti-mouse TWEAK  Affinity Purified anti-mouse TWEAK	Format Excite (nm)  PE anti-mouse TWEAK 488  Biotin anti-mouse TWEAK N/A  Affinity Purified anti-mouse TWEAK N/A	Format  Excite (nm) (nm)  PE anti-mouse TWEAK  Biotin anti-mouse TWEAK  Affinity Purified anti-mouse TWEAK  N/A  N/A  N/A

\*Functional Grade™ (FG™): Azide-free, sterile-filtered, and endotoxin < 0.001 ng/µg.
Purified: Contains azide, not sterile-filtered, and not endotoxin tested.

## Description

The MTW-1 monoclonal antibody reacts with mouse TWEAK, a type II transmembrane TNF superfamily member with high identity to TNF in its extracellular portion. TWEAK transcript is expressed broadly in many adult and fetal tissues. TWEAK is expressed as membrane bound and secreted forms. Interaction of TWEAK with its counter-receptor (Fn14, TWEAK-R) promotes secretion of IL-8, activation of NF-κB, proliferation of endothelial cells, and apoptosis in a number of human cell lines. Initially, DR3 was thought to be a receptor for TWEAK, but further studies have shown that TWEAK could induce apoptosis via receptors distinct from DR3. While TWEAK exhibits overlapping signaling functions to TNF, it is generally less effective in inducing apoptosis, giving rise to its name, TNF-like weak inducer of apoptosis.

### Usage

For research use only, not for diagnostic or therapeutic use. MTW-1 has been reported for use in flow cytometric analysis.

# **Applications Tested**

The MTW-1 antibody has been tested by flow cytometric analysis of mouse TWEAK-transfected cells and can be used at less than or equal to  $0.06~\mu g$  per million cells. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### **Related Products**

Cat. 13-4301 Biotin Rat IgG1 Isotype Control

Cat. 11-4317 Streptavidin-FITC (Fluorescein isothiocyanate)

Cat. 12-4317 Streptavidin-PE (Phycoerythrin)

Cat. 17-4317 Streptavidin Allophycocyanin (SA-APC)

#### References

Nakayama M, Harada N, Okumura K, Yagita H. Characterization of murine TWEAK and its receptor (Fn14) by monoclonal antibodies. Biochem Biophys Res Commun. 2003 Jul 11;306(4):819-25.

Nakayama, M., N. Kayagaki, et al. (2000). "Involvement of TWEAK in Interferon {gamma}-stimulated Monocyte Cytotoxicity." J. Exp. Med. 192(9): 1373-1380.

Chicheportiche, Y., P. R. Bourdon, et al. (1997). "TWEAK, a new secreted ligand in the tumor necrosis factor family that weakly induces apoptosis." J Biol Chem 272(51): 32401-10.

Kaplan, M. J., D. Ray, et al. (2000). "TRAIL (Apo2 ligand) and TWEAK (Apo3 ligand) mediate CD4+ T cell killing of antigen-presenting macrophages [In Process Citation]." J Immunol 164(6): 2897-904.

Lynch, C. N., Y. C. Wang, et al. (1999). "TWEAK induces angiogenesis and proliferation of endothelial cells." J Biol Chem 274(13): 8455-9.

 $\label{eq:convergence} \text{Copyright} \ @\ 2000\text{-}2005\ eBioscience,\ Inc.}$  Product For Research Use Only: Not for further distribution without written consent.