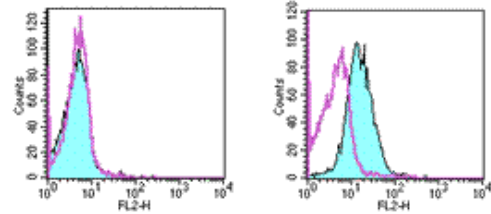


## Product Information

Contents: Functional Grade Purified anti-mouse TWEAK  
Catalog Number: 16-9913  
Sizes: 50 ug, 100 ug, 500 ug  
Formulation: Phosphate buffer pH 7.2,  
150 mM NaCl, No NaN<sub>3</sub>  
Storage Conditions: Store at 4°C.  
Avoid repeated freeze/thaw cycles.  
**KEEP CONTENT STERILE.**  
Endotoxin Level: Less than 0.001 ng/ug antibody, as determined  
by the LAL assay.  
Clone: MTW-1  
Isotype: Rat IgG1, κ



*Staining of non-transfected (left) and TWEAK transfected (right) L5178Y cells with 0.5 µg of purified rat IgG1 isotype control (cat. 14-4301) (open histogram) or 0.25 µg of FG purified MTW-1 (colored histogram) followed by Biotin Anti-rat IgG (cat. 13-4813) and SAV-PE (cat. 12-4312). Total viable cells were used for analysis.*

Available Formats of This Product				
Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
12-9913	PE anti-mouse TWEAK	488	575	FC
13-9913	Biotin anti-mouse TWEAK	N/A	N/A	FC
14-9913	Affinity Purified anti-mouse TWEAK	N/A	N/A	FC
16-9913	Functional Grade* Purified anti-mouse TWEAK	N/A	N/A	FC

\*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 0.5 µg per million cells. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

## Related Products

Cat. 16-4301 Functional Grade Purified Rat IgG1 Isotype Control  
Cat. 11-4317 Streptavidin-FITC (Fluorescein isothiocyanate)  
Cat. 12-4317 Streptavidin-PE (Phycoerythrin)  
Cat. 17-4317 Streptavidin Allophycocyanin (SA-APC)  
Cat. 13-4813 Biotin Anti-Rat IgG (clone Polyclonal)

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## References

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- 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.