
Anti-Human CD255 (TWEAK) Purified

Catalog Number: 14-9916

Also Known As: TNF-related weak inducer of apoptosis, APO3L

RUO: For Research Use Only

Product Information

Contents: Anti-Human CD255 (TWEAK) Purified

 **Catalog Number:** 14-9916

Clone: CARL-2

Concentration: 0.5 mg/mL

Host/Isotype: Mouse IgM, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

 **Temperature Limitation:** Store at 2-8°C.

 **Batch Code:** Refer to Vial

 **Use By:** Refer to Vial

 **Caution, contains Azide**

Description

The CARL-2 monoclonal antibody reacts with human 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, however, the staining of human peripheral blood mononuclear cells with monoclonal antibodies shows a more restricted pattern. While freshly isolated PBMCs do not express detectable levels of TWEAK on their surface, IFN gamma-stimulated blood monocytes rapidly upregulate TWEAK surface expression. TWEAK is expressed as membrane bound and secreted forms. Interaction of TWEAK with its counter-receptor promotes secretion of IL-8, activation of NF-kappaB, 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. For detection of human TWEAK by sandwich ELISA, a combination of purified CARL-2 for capture and biotinylated CARL-1 for detection is recommended.

Applications Reported

This CARL-2 antibody has been reported for use in ELISA. It has also been reported in blocking of TWEAK-induced cell death in functional studies.

Applications Tested

This CARL-2 antibody has been tested by sandwich ELISA testing. This can be used at less than or equal to 8 ug/ml as capture antibody. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

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

Kaplan, M. J., D. Ray, et al. (2000). TRAIL (Apo2 ligand) and TWEAK (Apo3 ligand) mediate CD4+ T cell killing of antigen-presenting macrophages. *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.

Schneider, P., R. Schwenzer, et al. (1999). TWEAK can induce cell death via endogenous TNF and TNF receptor 1. *Eur J Immunol* 29(6): 1785-92. 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.

Related Products

00-4202 ELISA Diluent Solution (5X)

13-9915 Anti-Human CD255 (TWEAK) Biotin (CARL-1)

14-4752 Mouse IgM Isotype Control Purified

14-8916 Human CD255 (TWEAK) Recombinant Protein

18-4100 Avidin HRP

44-2404 Nunc MaxiSorp® flat-bottom 96 well plate

Not for further distribution without written consent.

Copyright © 2000-2010 eBioscience, Inc.

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com