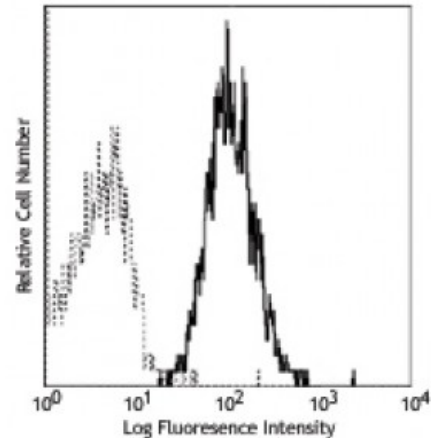


**Purified anti-human CD255 (TWEAK)**

**Catalog # / Size:** 2141510 / 100 µg  
**Clone:** CARL-1  
**Isotype:** Mouse IgG3, κ  
**Immunogen:** hTWEAK/2PK-3 transfectant cells  
**Reactivity:** Human  
**Preparation:** The antibody was purified by affinity chromatography.  
**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.  
**Concentration:** 0.5



Human TWEAK transfected cells stained with Carl-1 PE

**Applications:**

**Applications:** Flow Cytometry, Immunohistochemistry

**Recommended Usage:** Each lot of this antibody is quality control tested by sandwich ELISA. For ELISA capture applications, a concentration range of 1-4 microg/ml is recommended. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:**  
**Flow Cytometry:** For most successful immunofluorescent staining results, it may be important to maximize signal over background by using a relatively bright fluorochrome-antibody conjugate (Cat. No. 308306) or by using a high sensitivity, three-layer staining technique (e.g., including a biotinylated antibody (Cat. No. 308304) or biotinylated anti-mouse IgG second step (Cat. No. 405303), followed by SAV-PE (Cat. No. 405204)).  
**ELISA Detection:** The biotinylated CARL-1 antibody is useful as the detection antibody in sandwich ELISA for measuring human TWEAK protein, in combination with CARL-2 antibody (Cat. No. 308402) used as ELISA capture.  
**Neutralization<sup>1,2</sup>:** In a dose-dependent manner, CARL-1 is more effective than CARL-21. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 308307).

**Application References:**  
 1. Nakayama, M., *et al.* 2000. *J. Exp. Med.* 192:1373. (Neut)  
 2. Nakayama, M., *et al.* 2003. *J. Immunol.* 170:341. (Neut)  
 3. Zou H, *et al.* 2011. *Gynecol Oncol.*123:123. [PubMed](#).

**Description:** TNF-like weak inducer of apoptosis (TWEAK) is a type II transmembrane TNF superfamily member with strong homology to TNF in its extracellular portion, though less potent in inducing apoptosis. It has been clustered as CD255. TWEAK transcript is expressed broadly in many adult and fetal tissues; however, the staining of human peripheral blood mononuclear cells with TWEAK-specific antibodies shows a more restricted pattern. TWEAK is expressed as membrane-bound and secreted forms. Interaction of TWEAK with its receptors (DR3, Fn14) promotes secretion of IL-8, activation of NF-κB, proliferation of endothelial cells, and apoptosis in a number of human cell lines.

**Antigen References:** 1. Fitzgerald, K., *et al.* Eds. 2001. *The Cytokine FactsBook*. Academic Press, San Diego.

2. Chicheportiche, Y., *et al.* 1997. *J. Biol. Chem.* 272:32401.
3. Kaplan, M., *et al.* 2000. *J. Immunol.* 164:2