

TECHNICAL DATA SHEET

CyFlow™ CD255 PE Anti-Hu; Clone CARL-1

REF AS153004

For Research Use Only.
Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD255
Alternative Names	TWEAK
Clone	CARL-1
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG3
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Human CD255-transfected 2PK-3 cells

Specificity

The mouse monoclonal antibody CARL-1 recognizes CD255 (TWEAK) antigen, a type II transmembrane protein of the TNF superfamily able to weakly induce apoptosis in many cell types.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 10 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD255 (TWEAK; TNF-related weak inducer of apoptosis), a type II transmembrane protein expressed as membrane-bound and secreted form, can induce apoptosis in many tissues and cell lines through its receptor CD266 (TWEAK R). On the other hand, in endothelial cells this interaction can induce proliferation and promote angiogenesis including neovascularization of tumors. CD255 can act in a juxtacrine manner to initiate cellular responses, and induces secretion of pro-inflammatory cytokines. Besides CD266, CD255 may also bind to DR3.

References

- Nakayama M, Kayagaki N, Yamaguchi N, Okumura K, Yagita H: Involvement of TWEAK in interferon gamma-stimulated monocyte cytotoxicity. J Exp Med. 2000 Nov 6; 192(9):1373-80. < PMID: 11067885 >
- Nakayama M, Ishidoh K, Kojima Y, Harada N, Kominami E, Okumura K, Yagita H: Fibroblast growth factor-inducible 14 mediates multiple pathways of TWEAK-induced cell death. J Immunol. 2003 Jan 1; 170(1):341-8. < PMID: 12496418 >
- Saitoh T, Nakayama M, Nakano H, Yagita H, Yamamoto N, Yamaoka S: TWEAK induces NF-kappaB2 p100 processing and long lasting NF-kappaB activation. J Biol Chem. 2003 Sep 19; 278(38):36005-12. < PMID: 12840022 >

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

- Hosokawa Y, Hosokawa I, Ozaki K, Nakae H, Matsuo T: Proinflammatory effects of tumour necrosis factor-like weak inducer of apoptosis (TWEAK) on human gingival fibroblasts. Clin Exp Immunol. 2006 Dec; 146(3):540-9. < PMID: 17100776 >
- Brown SA, Ghosh A, Winkles JA: Full-length, membrane-anchored TWEAK can function as a juxtacrine signaling molecule and activate the NF-kappaB pathway. J Biol Chem. 2010 Jun 4; 285(23):17432-41. < PMID: 20385556 >
- Yoriki R, Akashi S, Sho M, Nomi T, Yamato I, Hotta K, Takayama T, Matsumoto S, Wakatsuki K, Migita K, Yagita H, Nakajima Y: Therapeutic potential of the TWEAK/Fn14 pathway in intractable gastrointestinal cancer. Exp Ther Med. 2011 Jan; 2(1):103-108. < PMID: 22977477 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com