CD266 (TWEAK Receptor) Monoclonal Antibody (ITEM-4), Functional Grade, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Published Species	Human
Host/Isotype	Mouse / IgG2b, kappa
Recommended Isotype Control	Mouse IgG2b kappa Isotype Control (eBMG2b), Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	ITEM-4
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage conditions	4° C
RRID	AB_2573121

Applications	Tested Dilution	Publications
Western Blot (WB)	Assay-Dependent	2 Publications
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	-
Flow Cytometry (Flow)	1 µg/test	1 Publication
Neutralization (Neu)	-	1 Publication
Functional Assay (FN)	Assay-Dependent	-

Product Specific Information

Description: The ITEM-4 antibody reacts with human TWEAK Receptor/Fn14 (fibroblast growth factor-inducible 14 kDa protein). Fn14 is distantly related to the TNFR family, containing one cysteine-rich domain in the extracellular region and a TNFR-associated factor binding domain but does not contain a death domain (DD) cytoplasmic region. Fn14 plays a role in TWEAK-induced endothelial cell migration, proliferation, and angiogenesis. TWEAK-induced cell death via Fn14 includes both apoptosis and necrosis and can be blocked by an anti-TWEAK antibody, CARL-1. Fn14 is expressed on HUVEC and in some cancer tissues but not on freshly isolated PBMCs. Fn14 mRNA expression has been identified during liver regeneration. It has been reported that ITEM-4 cross-reacts with mouse Fn14. In the mouse, Fn14 is reported to be constitutively expressed by Colon 26 cell line.

The ITEM-4 antibody has been show to have blocking function.

Applications Reported: This ITEM-4 antibody has been reported for use in flow cytometric analysis, western blotting, and immunohistochemical staining of frozen tissue sections.

Applications Tested: This ITEM-4 antibody has been tested by flow cytometry of CD266 transfected cell lines. This can be

used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Storage and handling: Use in a sterile environment.

Filtration: 0.2 µm post-manufacturing filtered.

Purity: Greater than 90%, as determined by SDS-PAGE.

Endotoxin Level: Less than 0.001 ng/µg antibody, as determined by LAL assay.

Aggregation: Less than 10%, as determined by HPLC.

4 References

Western Blot (2)

Molecular endocrinology (Baltimore, Md.)

Chronic activation of FXR in transgenic mice caused perinatal toxicity and sensitized mice to cholesterol toxicity.

"Published figure using CD266 (TWEAK Receptor) monoclonal antibody (Product # 16-9018-82) in Western Blot"

Authors: Cheng Q,Inaba Y,Lu P,Xu M,He J,Zhao Y,Guo GL,Kuruba R,de la Vega R,Evans RW,Li S,Xie W

Year
2015

Atherosclerosis

The CD163-expressing macrophages recognize and internalize TWEAK: potential consequences in atherosclerosis.

Authors: Moreno JA,Muñoz-García B,Martín-Ventura JL,Madrigal-Matute J,Orbe J,Páramo JA,Ortega L,Egido J,Blanco-Colio LM

Year
2009

Flow Cytometry (1)

Nature

Resolving the fibrotic niche of human liver cirrhosis at single-cell level.

"16-9018 was used in Flow cytometry/Cell sorting to investigate molecular definitions for non-parenchymal cell types in the healthy and cirrhotic human liver through transcriptomics."

Authors: Ramachandran P,Dobie R,Wilson-Kanamori JR,Dora EF,Henderson BEP,Luu NT,Portman JR,Matchett KP,Brice M,Marwick JA,Taylor RS,Efremova M,Vento-Tormo R,Carragher NO,Kendall TJ,Fallowfield JA,Harrison EM,Mole DJ,Wigmore SJ,Newsome PN,Weston CJ,Iredale JP,Tacke F,Pollard JW,Ponting CP,Marioni JC,Teichmann SA,Henderson NC

Year
2019

Species
Human

Neutralization (1)

Stem cells and development

A Paracrine Mechanism Accelerating Expansion of Human Induced Pluripotent Stem Cell-Derived Hepatic Progenitor-Like Cells.

"16-9018 was used in Blocking experiments to reveal the expression profile of cell surface molecules in human induced pluripotent stem cell-derived hepatic progenitor-like cells."

Authors: Tsuruya K,Chikada H,Ida K,Anzai K,Kagawa T,Inagaki Y,Mine T,Kamiya A

Year
2015

Species
Human