Datasheet for ABIN2749106

anti-CD137 antibody (PE)

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Overview

Quantity:	100 tests
Target:	CD137 (TNFRSF9)
Reactivity:	Human, Non-Human Primate
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD137 antibody is conjugated to PE
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	Recombinant human CD137 ectodomain
Clone:	4B4-1
Isotype:	IgG1 kappa
Specificity:	The mouse monoclonal antibody 4B4-1 recognizes an extracellular conformational epitope on CD137, an approximately 40 kDa type I transmembrane protein of the TNFR family expressed mainly on activated T cells.
Cross-Reactivity (Details):	Human, Non-Human Primates
Purification:	Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

Target:	CD137 (TNFRSF9)

Target Details

Alternative Name:	CD137 / 4-1BB (TNFRSF9 Products)
Background:	TNF receptor superfamily member 9,CD137, also known as TNFRSF9 or 4-1BB, is an inducible costimulatory molecule expressed mainly on activated T cells. Its ligand, known as 4-1BBL, is expressed on activated macrophages, mature B cells, hematopoietic stem cells, and myeloid progenitor cells. CD137 signaling leads to maintaining the survival of activated T cells and CD8+ memory T cells, and clonal expansion of T cells, but also to suppressing myelopoiesis and dendritic cell development. Triggered CD137 induces a cytokine release profile regulating peripheral monocyte survival. Soluble forms of CD137 may provide negative control mechanism for some immune responses.,TNFRSF9, 41BB, 4-1BB, MGC2172
Gene ID:	3604
UniProt:	Q07011
Pathways:	Cancer Immune Checkpoints

Application Details

Application Notes:	Flow cytometry: The reagent is designed for analysis of human blood cells using 10 µL reagent / 100 µL of whole blood or 10^6 cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.
Comment:	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Restrictions:	For Research Use only

Handling

Buffer:	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Publications

Product cited in:

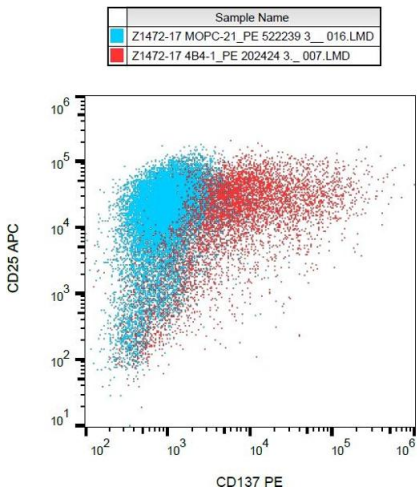
Yi, Zhao, Wang, Dai, Hellström, Hellström, Zhang: "Human and mouse CD137 have predominantly different binding CRDs to their respective ligands." in: **PLoS ONE**, Vol. 9, Issue 1, pp. e86337, (2014) (PubMed).

Bellarosa, Bressan, Bigioni, Parlani, Maggi, Binaschi: "SAHA/Vorinostat induces the expression of the CD137 receptor/ligand system and enhances apoptosis mediated by soluble CD137 receptor in a human breast cancer cell line." in: **International journal of oncology**, Vol. 41, Issue 4, pp. 1486-94, (2013) (PubMed).

Fernández Do Porto, Jurado, Pasquinelli, Alvarez, Aspera, Musella, García: "CD137 differentially regulates innate and adaptive immunity against Mycobacterium tuberculosis." in: **Immunology and cell biology**, Vol. 90, Issue 4, pp. 449-56, (2012) (PubMed).

Chan, Voskens, Lin, Schindler, Azimzadeh, Wang, Taylor, Strome, Schulze: "Epitope mapping of a chimeric CD137 mAb: a necessary step for assessing the biologic relevance of non-human primate models." in: **Journal of molecular recognition : JMR**, Vol. 22, Issue 3, pp. 242-9, (2009) (PubMed).

Images



Flow Cytometry

Image 1. Flow cytometry analysis (surface staining) of CD137 in PHA activated PBMC with anti-CD137 (4B4-1) PE.