

Datasheet for ABIN2800694

**anti-CD137 antibody**[Go to Product page](#)**2** Images**3** Publications

## Overview

Quantity:	0.1 mg
Target:	CD137 (TNFRSF9)
Reactivity:	Human, Non-Human Primate
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD137 antibody is un-conjugated
Application:	ELISA, Flow Cytometry (FACS), Immunoprecipitation (IP), Functional Studies (Func)

## 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 by protein-A affinity chromatography.
Purity:	> 95 % (by SDS-PAGE)
Endotoxin Level:	Endotoxin level is less than 0.01 EU/µg of the protein, as determined by the LAL test.

## Target Details

Target:	CD137 (TNFRSF9)
Alternative Name:	CD137 / 4-1BB ( <a href="#">TNFRSF9 Products</a> )
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:	<a href="#">Q07011</a>
Pathways:	<a href="#">Cancer Immune Checkpoints</a>

## Application Details

Application Notes:	Functional application: Inhibition of cytokine production. Flow cytometry: Recommended dilution: 1-4 µg/mL
Restrictions:	For Research Use only

## Handling

Concentration:	1 mg/mL
Buffer:	Phosphate buffered saline (PBS), pH 7.4
Preservative:	Azide free
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Do not freeze.

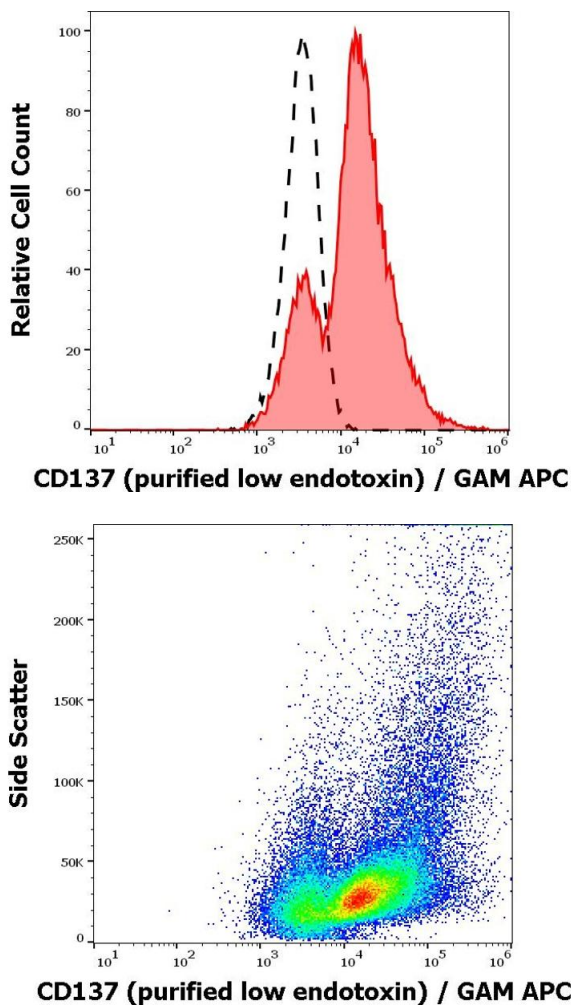
## Publications

Product cited in:	Yi, Zhao, Wang, Dai, Hellström, Hellström, Zhang: "Human and mouse CD137 have predominantly different binding CRDs to their respective ligands." in: <b>PLoS ONE</b> , Vol. 9, Issue 1, pp. e86337, (2014) ( <a href="#">PubMed</a> ).
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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.** Separation of cells stained using anti-human CD137 (4B4-1) purified antibody (low endotoxin, concentration in sample 4 µg/mL, GAM APC, red-filled) from cells unstained by primary antibody (GAM APC, black-dashed) in flow cytometry analysis (surface staining) of human PHA stimulated peripheral blood mononuclear cell suspension.

Flow Cytometry

**Image 2.** Flow cytometry surface staining pattern of human PHA stimulated peripheral blood mononuclear cell suspension stained using anti-human CD137 (4B4-1) purified antibody (low endotoxin, concentration in sample 4 µg/mL) GAM APC.