

Datasheet: MCA6117APC

BATCH NUMBER 163817

Description:	MOUSE ANTI HUMAN CD137:APC
Specificity:	CD137
Other names:	TNFRSF9
Format:	APC
Product Type:	Monoclonal Antibody
Clone:	4B4-1
Isotype:	IgG1
Quantity:	100 TESTS/1ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Human

Species Cross Reactivity

Reacts with: Primate

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG conjugated to Allophycocyanin (APC) - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	APC	650	661

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative	<0.1% Sodium Azide (NaN ₃)
Stabilisers	0.2% Bovine Serum Albumin
Immunogen	Recombinant human CD137 ectodomain
External Database Links	<p>UniProt: Q07011 Related reagents</p> <p>Entrez Gene: 3604 TNFRSF9 Related reagents</p>
Synonyms	CD137, ILA
Specificity	<p>Mouse anti Human CD137, clone 4B4-1 recognizes CD137. CD137 (also known as 4-1BB ligand receptor or TNFRSF9) is a type I transmembrane glycoprotein of the Tumor Necrosis Factor receptor family that is expressed on activated T and NK cells, dendritic cells, myeloid cells and at the surface of some non-lymphoid cells under specific conditions (Schwarz et al. 1995). CD137 acts as a receptor for 4-1BB ligand, expressed on activated macrophages, activated B cells, hematopoietic stem cells and myeloid progenitor cells (Pollock et al. 1994) and for some proteins of the extracellular matrix (Chalupny et al. 1992).</p> <p>The interaction between CD137 and 4-1BBL acts as a co-stimulatory signal for the activation, expansion and survival of T cells (Wen et al. 2002). CD137 signaling is involved in the generation of CD8+ T cells and enhance their cytotoxic activity (Shuford et al. 1997). Because of its ability to promote the anti-tumorigenic activity of cytotoxic T cells, CD137 is the target of several cancer immune therapies, such as the agonist anti-CD137 Urelumab (Segal et al. 2017) and Utomilumab (Chester et al. 2018). CD137 also binds to the adaptor proteins TRAF1, 2 and 3 to promote NF-kappaB activation (Jang et al. 1998).</p> <p>Mouse anti-human CD137, clone 4B4-1 has been reported to immunoprecipitate a homodimeric protein of 32kDa under reducing conditions and 85kDa under non-reducing conditions (Garni-Wagner et al. 1996).</p>
Purity	>95% by SDS PAGE
Flow Cytometry	Use 10ul of the undiluted reagent to label 1x10 ⁶ cells in 100ul
Storage	<p>Store at +4°C. DO NOT FREEZE.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light.</p>
Guarantee	Guaranteed for 12 months from the date of despatch or until the date of expiry, whichever comes first. Please see label for expiry date.

**Health And Safety
Information**

Material Safety Datasheet documentation #10041 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA6117APC>
10041

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:APC \(MCA928APC\)](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

'M401946:220718'

Printed on 19 Jan 2024

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