

Datasheet: MCA6117

Description:	MOUSE ANTI HUMAN CD137
Specificity:	CD137
Other names:	TNFRSF9
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	4B4-1
Isotype:	IgG1
Quantity:	0.1 mg

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	▪			
ELISA	▪			
Immunoprecipitation	▪			
Functional Assays	▪			

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 - liquid

Preparation

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

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
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
Storage	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
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 #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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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

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