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CD137 (Mouse) Monoclonal Rat Antibody (LOB12)

Product Description

CD137 (4-1BB), a member of the tumor necrosis factor receptor superfamily, is a type I transmembrane glycoprotein expressed on the cell surface of activated splenic T cells and thymocytes. The functions of CD137 in T lymphocytes include regulating activation, proliferation and apoptosis. CD137 and CD28 are costimulatory molecules of T cell activation. Costimulatory molecules are important in initiating anti-tumor immune responses. CD137 plays an important role in regulating T-cell-dependent immune responses. Expression of CD137 correlates negatively with lymphocyte proliferation and positively with the degree of activation-induced cell death caused by mitogen overstimulation. In monocytes, CD137 induces activation, promotes adherence and prolongs survival. The LOB12. 3 antibody is an agonistic antibody that has been shown to stimulate 4-1BB signaling and delay tumor growthin vivo when administered in combination with immune checkpoint inhibitors.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 2012, Anti-CD137, (LOB12)

Product attributes

Antibody number	#2012
Antibody reactivity (target)	CD137,
Antibody type	Primary
Host species	Rat
Clonality	Monoclonal
Clone	LOB12
Isotype	IgG2a, kappa
Molecular weight of antigen	39 kDa
Synonyms	4-1BB ligand receptor; 4-1BB; Mouse; homolog; CD137; HLDA VI; induced by lymphocyte activation (ILA); Interleukin activated receptor homolog of Mouse Ly63; Ly63; Mouse; Receptor protein 4 1BB; T cell antigen ILA; T-cell antigen 4-1BB homolog; T-cell antigen ILA; TNF receptor superfamily member 9; Tumor necrosis factor receptor superfamily member 9 (TNFRSF9)
Human gene symbol	Tnfrsf9 (Mouse)
Entrez gene ID	21942
SwissProt	P20334
Unigene	244187
Immunogen	Murine CD137 human Fc fusion protein
Antibody target cellular localization	Plasma membrane
Species reactivity	Mouse
Expected antibody applications	ELISA (published for clone), Functional studies (published for clone)
Positive control	MPBMC's or Thymus.
Shipping condition	Room temperature
Storage Conditions	Note: store BSA-free antibodies at -10 to -35°C, Store at 2 to 8 °C, Protect fluorescent conjugates from light
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.
Cell/tissue expression	T-cells

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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References

Note: References for this clone sold by other suppliers may be listed for expected applications.

Eur J Immunol (2002) 32: 3617-3627. (functional studies; ELISA)