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InnoCyto Inc.

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Anti-Human CD137 (4-1BB) Antibody

Catalog Number:	108001, 108002
Size:	100 ug, 500 ug
Target Name:	CD137, 4-1BB, ILA, TNFRSF9
Regulatory Status:	RUO

PRODUCT DETAILS

Clone:	4B4-1
Application:	Flow Cytometry
Reactivity:	Human
Format:	Purified
Isotype:	Mouse IgG1
Antibody Type:	Monoclonal
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Protein Concentration:	0.5 mg/mL
Storage&Handling:	The antibody solution should be stored between 2°C and 8°C
Recommended Usage:	For flow cytometric staining, it is recommended to use less than 0.2 µg of this reagent per 0.5-1.0 million cells in a 100 µL volume. Optimal reagent performance should be determined by titration for each specific application
Isotype Control:	301401
RRID:	AB_3738813
GeneID:	3604

BACKGROUND INFORMATION

CD137 is a 39 kDa type I transmembrane protein and a member of the Tumor Necrosis Factor Receptor (TNFR) superfamily. It is expressed on activated T cells, NKT cells, and NK cells, where it functions as a co-stimulatory molecule that promotes T cell proliferation, survival, and monocyte activation through its interaction with 4-1BB ligand. CD137 plays a key role in anti-tumor immunity. Agonistic anti-CD137 antibodies enhance tumor-specific $CD8^+$ T cell responses, increase NK and dendritic cell function, and improve antibody-dependent cellular cytotoxicity (ADCC) when used with tumor-targeting monoclonal antibodies. Its expression can be upregulated on NK cells after CD16 ligation, although its effect on NK cell cytotoxicity can vary between human and murine systems. Overall, CD137 is an important immunomodulatory target in cancer immunotherapy.