# CD137 / 4-1BB / TNFRSF9 Antibody

Mouse Monoclonal Antibody [Clone 4-1BB/3201]

| Catalog No | Format | Size |
|---|---|---|
| 3604-MSM1-B1 | Purified Ab conjug | ed to Biotin |
| 3604-MSM1-P0 | Purified Ab with BSA and Azide | 200ug/ml |
| 3604-MSM1-P1 | Purified Ab with BSA and Azide | 200ug/ml |
| 3604-MSM1-P1ABX | Purified Ab WITHOUT BSA and Azide | 1.0mg/ml |

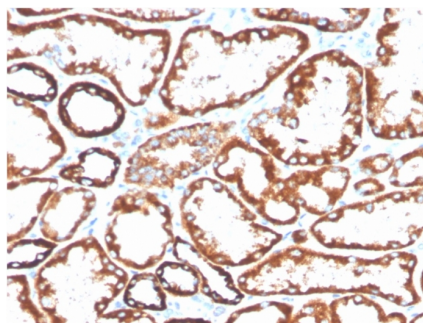| Applications | Tested Dillution |
|---|---|
| Flow Cytometry (Flow) | 1-2ug/million cells |
| Immunofluorescence (IF) | 1-3ug/ml |
| Immunohistochemistry (IHC) | 1-2ug/ml |
| Western Blot (WB) | 2-4ug/ml |

## Product Details

| | |
|---|---|
| **Clone** | 4-1BB/3201 |
| **Gene Name** | Tnfrsf9 |
| **Immunogen** | A recombinant fragment (around aa 19-188) of human CD137 protein (exact sequence is proprietary) |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Isotype / Light Chain** | IgG1 |
| **Mol. Weight of Antigen** | 32kDa (monomer); 85kDa (dimer) |
| **Cellular Localization** | Cell surface, Membrane |
| **Species Reactivity** | Human |
| **Positive Control** | Human kidney cancer |

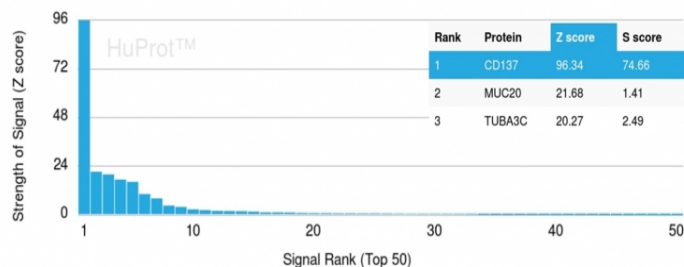*Optimal dilution for a specific application should be determined.*

## Product Images for CD137 / 4-1BB / TNFRSF9 Antibody
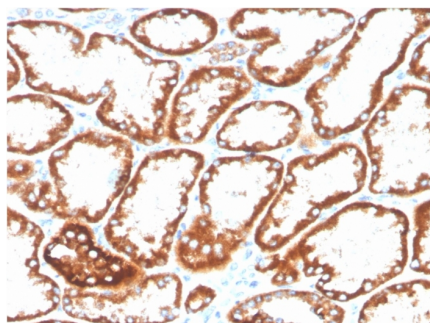


Formalin-fixed, paraffin-embedded human Renal Cell Carcinoma stained with Biotin-conjugated CD137 Mouse Monoclonal Antibody (4-1BB/3201).



Formalin-fixed, paraffin-embedded human Renal Cell Carcinoma stained with Biotin-conjugated CD137 Mouse Monoclonal Antibody (4-1BB/3201).

| Rank | Protein | Z score | S score |
|------|---------|---------|---------|
| 1 | CD137 | 96.34 | 74.66 |
| 2 | MUC20 | 21.68 | 1.41 |
| 3 | TUBA3C | 20.27 | 2.49 |

Analysis of Protein Array containing more than 19,000 full-length human proteinsusing CD137-Monospecific Mouse Monoclonal Antibody (4-1BB/3201). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

## Specificity & Comments

CD137 belongs to the tumor necrosis factor receptor family and delivers a costimulatory signal to T lymphocytes. It is expressed on activated T cells and binds an inducible ligand that is found on B cells, macrophages and dendritic cells. Interactions between CD137 and its ligand are involved in antigen presentation and the generation of cytotoxic T cells. CD137 antibody may improve cancer treatment, and has been implicated in breast cancer, melanoma and lymphoma.

## Research Areas

Cardiovascular, Immunology, AKT Signaling, B Cell Markers, Cytokine Signaling

## Known Applications & Suggested Dilutions

ELISA (For coating, order antibody without BSA) | ,Immunofluorescence (1-2ug/ml) | Flow Cytometry (1-2ug/million cells) | Western Blot (1-2ug/ml) | Immunohistochemistry (Formalin-fixed) (2-4ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95 &degC followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.

## Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.

There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

## Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

## Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.