



# Syrian Hamster Anti-Mouse CD28 Monoclonal antibody, clone 37.51 (CABT-L4358)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

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| <b>Product Overview</b>   | The 37.51 monoclonal antibody reacts with mouse CD28, a 45 kDa costimulatory receptor and a member of the Ig superfamily. CD28 is expressed by thymocytes, most peripheral T cells, and NK cells. CD28 is a receptor for CD80 (B7-1) and CD86 (B7-2). Signaling through CD28 augments IL-2 and IL-2 receptor expression as well as cytotoxicity of CD3-activated T cells. The 37.51 antibody has been shown to stimulate the proliferation and cytokine production by activated T and NK cells and provide a costimulatory signal for CTL induction. |
| <b>Target</b>             | Mouse CD28                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Immunogen</b>          | C57BL/6 mouse T cell lymphoma EL-4 cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Isotype</b>            | IgG2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Source/Host</b>        | Syrian Hamster                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Species Reactivity</b> | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Clone</b>              | 37.51                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Purification</b>       | Protein G purified.<br>Purity>95%. Determined by SDS-PAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Conjugate</b>          | Functional Grade                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Applications</b>       | in vitro?T cell stimulation/activation, in vivo CD28 blockade                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Molecular Weight</b>   | 150 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Format</b>             | 0.2 µM filtered liquid. Purified from tissue culture supernatant in an animal free facility                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Concentration</b>      | Lot specific                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

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| <b>Size</b>         | 5 mg                                                                                                                                                                                                                    |
| <b>Buffer</b>       | PBS, pH 6.0 0.01% Tween. Contains no stabilizers or preservatives. [low endotoxin azide-free]<br><br>Endotoxin level: <2EU/mg (<0.002EU/μg). Determined by LAL gel clotting assay<br>Related dilution buffer: CABT-LB03 |
| <b>Preservative</b> | None                                                                                                                                                                                                                    |
| <b>Storage</b>      | The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.                                                                                                 |
| <b>Ship</b>         | Wet ice                                                                                                                                                                                                                 |

## BACKGROUND

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| <b>Introduction</b> | The protein encoded by this gene is essential for T-cell proliferation and survival, cytokine production, and T-helper type-2 development. Several alternatively spliced transcript variants encoding different isoforms have been found for this gene. |
| <b>Keywords</b>     | Tp44, T44                                                                                                                                                                                                                                               |

## GENE INFORMATION

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| <b>Official Symbol</b> | CD28 molecule                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Synonyms</b>        | Tp44, T44                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>References</b>      | Lacher, S. M., et al. (2018). "NF-kappaB inducing kinase (NIK) is an essential post-transcriptional regulator of T-cell activation affecting F-actin dynamics and TCR signaling." J Autoimmun 94: 110-121. PubMed;Xiao, N., et al. (2014). "The E3 ubiquitin ligase Itch is required for the differentiation of follicular helper T cells." Nat Immunol 15(7): 657-666. PubMed;Choi, Y. S., et al. (2013). "Bcl6 expressing follicular helper CD4 T cells are fate committed early and have the capacity to form memory." J Immunol 190(8): 4014-4026. PubMed;Eberlein, J., et al. (2012). "Multiple layers of CD80/86-dependent costimulatory activity regulate primary, memory, and secondary lymphocytic choriomeningitis virus-specific T cell immunity." J Virol 86(4): 1955-1970. PubMed;Angkasekwinai, P., et al. (2010). "Regulation of IL-9 expression by IL-25 signaling." Nat Immunol 11(3): 250-256. PubMed |