



Rat Anti-Mouse CD8 α Monoclonal antibody, clone YTS 169.4 (CABT-L4569)

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

PRODUCT INFORMATION

Product Overview The YTS 169.4 monoclonal antibody reacts with mouse CD8 α . The CD8 antigen is a transmembrane glycoprotein that acts as a co-receptor for the T cell receptor (TCR).

Target	Mouse CD8 α
Immunogen	CBA mouse thymocytes
Isotype	IgG2b, K
Source/Host	Rat
Species Reactivity	Mouse
Clone	YTS 169.4
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vivo CD8+ T cell depletion, WB
Molecular Weight	150 kDa
Format	0.2 μ M filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free]

Endotoxin level: <1EU/mg (<0.001EU/μg). Determined by LAL gel clotting assay
Related dilution buffer: CABT-LB04

Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	The YTS 169.4 monoclonal antibody reacts with mouse CD8α. The CD8 antigen is a transmembrane glycoprotein that acts as a co-receptor for the T cell receptor (TCR). Like the TCR, CD8 binds to class I MHC molecules displayed by antigen presenting cells (APC). CD8 is primarily expressed on the surface of cytotoxic T cells, but can also be found on thymocytes, natural killer cells, and some dendritic cell subsets. CD8 most commonly exists as a heterodimer composed of one CD8α and one CD8β chain however, it can also exist as a homodimer composed of two CD8α chains. Both the CD8α and CD8β chains share significant homology to immunoglobulin variable light chains. The molecular weight of each CD8 chain is approximately 34 kDa. The YTS 169.4 antibody exhibits depleting activity when used in vivo.
Keywords	CD8A;CD8a molecule;T-cell surface glycoprotein CD8 alpha chain;CD8 antigen, alpha polypeptide (p32);

GENE INFORMATION

Official Symbol	CD8a molecule
Synonyms	CD8A; CD8a molecule; T-cell surface glycoprotein CD8 alpha chain; CD8 antigen, alpha polypeptide (p32);
References	Triplett, T. A., et al. (2018). "Reversal of indoleamine 2,3-dioxygenase-mediated cancer immune suppression by systemic kynureneine depletion with a therapeutic enzyme." <i>Nat Biotechnol</i> 36(8): 758-764. PubMed;Dai, M., et al. (2013). "Long-lasting complete regression of established mouse tumors by counteracting Th2 inflammation." <i>J Immunother</i> 36(4): 248-257. PubMed;Sledzinska, A., et al. (2013). "TGF-beta signalling is required for CD4(+) T cell homeostasis but dispensable for regulatory T cell function." <i>PLoS Biol</i> 11(10): e1001674. PubMed;Krieg, C., et al. (2010). "Improved IL-2 immunotherapy by selective stimulation of IL-2 receptors on lymphocytes and endothelial cells." <i>Proc Natl Acad Sci U S A</i> 107(26): 11906-11911. PubMed;Shariff, H., et al. (2010). "Intermittent antibody-based combination therapy removes alloantibodies and achieves indefinite heart transplant survival in presensitized recipients." <i>Transplantation</i> 90(3): 270-278. PubMed