



# Rat Anti-Mouse CD8 $\alpha$ Monoclonal antibody, clone 53-6.7 (CABT-L4317)

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

## PRODUCT INFORMATION

**Product Overview** The 53-6.7 monoclonal antibody reacts with mouse CD8 $\alpha$ . The CD8 antigen is a transmembrane glycoprotein that acts as a co-receptor for the T cell receptor (TCR).

<b>Target</b>	Mouse CD8 $\alpha$
<b>Immunogen</b>	Mouse Spleen Cells or Thymocyte Membranes
<b>Isotype</b>	IgG2a, K
<b>Source/Host</b>	Rat
<b>Species Reactivity</b>	Mouse
<b>Clone</b>	53-6.7
<b>Purification</b>	Protein G purified. Purity>95%. Determined by SDS-PAGE
<b>Conjugate</b>	Functional Grade
<b>Applications</b>	in vivo CD8+ T cell depletion, IF, FC, WB
<b>Molecular Weight</b>	150 kDa
<b>Format</b>	0.2 $\mu$ M filtered liquid. Purified from tissue culture supernatant in an animal free facility
<b>Concentration</b>	Lot specific
<b>Size</b>	5 mg
<b>Buffer</b>	PBS, pH 6.5. 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-LB02

<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

<b>Introduction</b>	The 53-6.7 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 53-6.7 antibody exhibits depleting activity when used in vivo.
<b>Keywords</b>	CD8A;CD8a molecule;T-cell surface glycoprotein CD8 alpha chain;CD8 antigen, alpha polypeptide (p32);

## GENE INFORMATION

<b>Official Symbol</b>	CD8a molecule
<b>Synonyms</b>	CD8A; CD8a molecule; T-cell surface glycoprotein CD8 alpha chain; CD8 antigen, alpha polypeptide (p32);
<b>References</b>	Wang, W., et al. (2018). "RIP1 Kinase Drives Macrophage-Mediated Adaptive Immune Tolerance in Pancreatic Cancer." <i>Cancer Cell</i> 34(5): 757-774 e757. PubMed;Hafalla, J. C., et al. (2012). "The CTLA-4 and PD-1/PD-L1 inhibitory pathways independently regulate host resistance to Plasmodium-induced acute immune pathology." <i>PLoS Pathog</i> 8(2): e1002504. PubMed;Chyou, S., et al. (2011). "Coordinated regulation of lymph node vascular-stromal growth first by CD11c+ cells and then by T and B cells." <i>J Immunol</i> 187(11): 5558-5567. PubMed;Kumar, D., et al. (2011). "Intranasal administration of an inactivated Yersinia pestis vaccine with interleukin-12 generates protective immunity against pneumonic plague." <i>Clin Vaccine Immunol</i> 18(11): 1925-1935. PubMed;Simma, O., et al. (2009). "Identification of an indispensable role for tyrosine kinase 2 in CTL-mediated tumor surveillance." <i>Cancer Res</i> 69(1): 203-211. PubMed