



# Mouse Anti-Mouse CD8 (Lyt 2.1) Monoclonal antibody, clone 116-13.1 (HB129) (CABT-L4414)

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

## PRODUCT INFORMATION

### Product Overview

The 116-13.1 monoclonal antibody reacts with mouse CD8 also known as Lyt-2. 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 CD8 $\alpha$  and one CD8 $\beta$  chain however it can also exist as a homodimer composed of two CD8 $\alpha$  chains. Both the CD8 $\alpha$  and CD8 $\beta$  chains share significant homology to immunoglobulin variable light chains. The molecular weight of each CD8 chain is approximately 34 kDa. The 116-13.1 antibody exhibits depleting activity when used in vivo .

<b>Target</b>	Mouse CD8 (Lyt 2.1)
<b>Immunogen</b>	CE mouse spleen cells and thymocytes
<b>Isotype</b>	IgG2a, $\kappa$
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Mouse
<b>Clone</b>	116-13.1 (HB129)
<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, FC
<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
<b>Size</b>	5 mg
<b>Buffer</b>	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free]  Endotoxin level: <2EU/mg (<0.002EU/µg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
<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>	CD8 (cluster of differentiation 8) is a transmembrane glycoprotein that serves as a co-receptor for the T cell receptor (TCR). Like the TCR, CD8 binds to a major histocompatibility complex (MHC) molecule, but is specific for the class I MHC protein. There are two isoforms of the protein, alpha and beta, each encoded by a different gene. In humans, both genes are located on chromosome 2 in position 2p12.
<b>Keywords</b>	CD8;cluster of differentiation 8;CD8a;CD8b;CD8A;CD8B;CD8B1

## GENE INFORMATION

<b>Official Symbol</b>	cluster of differentiation 8
<b>Synonyms</b>	CD8; cluster of differentiation 8; CD8a; CD8b; CD8A; CD8B; CD8B1
<b>References</b>	Racine, J. J., et al. (2014). "Induction of mixed chimerism depletes pre-existing and de novo-developed autoreactive B cells in autoimmune NOD mice." Diabetes 63(6): 2051-2062. PubMed;