



# Armenian Hamster Anti-Mouse TCR $\beta$ Monoclonal antibody, clone H57-597 (HB218) (CABT-L4405)

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

## PRODUCT INFORMATION

**Product Overview** The H57-597 monoclonal antibody reacts with the beta chain of the mouse T cell receptor (TCR). TCR $\beta$  belongs to the immunoglobulin superfamily and is expressed by thymocytes and T lymphocytes. TCR $\beta$  combines with TCR $\alpha$  to form TCR  $\alpha/\beta$ . TCR  $\alpha/\beta$  plays a central role in antigen recognition, signal transduction, and T cell activation. The H57-597 antibody has been shown to deplete TCR  $\alpha/\beta$  bearing T cells following in vivo administration.

<b>Target</b>	Mouse TCR $\beta$
<b>Immunogen</b>	Affinity purified TCR from mouse DO-11.10 cells
<b>Isotype</b>	IgG
<b>Source/Host</b>	Armenian Hamster
<b>Species Reactivity</b>	Mouse
<b>Clone</b>	H57-597 (HB218)
<b>Purification</b>	Protein G purified. Purity>95%. Determined by SDS-PAGE
<b>Conjugate</b>	Functional Grade
<b>Applications</b>	in vivo T cell depletion
<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 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>	The T cell receptor or TCR is a molecule found on the surface of T lymphocytes (or T cells) that is responsible for recognizing antigens bound to major histocompatibility complex (MHC) molecules. The binding between TCR and antigen is of relatively low affinity and is degenerate: that is, many TCR recognize the same antigen and many antigens are recognized by the same TCR.
<b>Keywords</b>	Tcrb;T-cell receptor beta chain;TCB;TCBC1;RATTCB;RATTCBC1;variable region-beta 8.5;T-cell receptor beta cluster

## GENE INFORMATION

<b>Official Symbol</b>	T-cell receptor beta chain
<b>Synonyms</b>	Tcrb;T-cell receptor beta chain;TCB;TCBC1;RATTCB;RATTCBC1;variable region-beta 8.5;T-cell receptor beta cluster
<b>References</b>	Schroder, P. M., et al. (2013). "Transient combination therapy targeting the immune synapse abrogates T cell responses and prolongs allograft survival in mice." PLoS One 8(7): e69397. PubMed;