



Mouse Anti-Mouse V β 8 TCR Monoclonal antibody, clone F23.1 (CABT-L4458)

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

PRODUCT INFORMATION

Product Overview

The F23.1 monoclonal antibody reacts with the V β 8.1, V β 8.2, and V β 8.3 TCR (V beta 8.1-3 T cell receptors) of mice having the b haplotype of the Tcrb gene complex (e.g., AKR, BALB/c, C3H, C57BL, DBA/1, DBA/2).

Target Mouse V β 8 TCR**Immunogen** BALB.B Mouse lymph node and spleen T cells**Isotype** IgG2a, κ**Source/Host** Mouse**Species Reactivity** Mouse**Clone** F23.1**Purification** Protein G purified.
Purity>95%. Determined by SDS-PAGE**Conjugate** Functional Grade**Applications** FC**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: <2EU/mg (<0.002EU/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 F23.1 monoclonal antibody reacts with the V β 8.1, V β 8.2, and V β 8.3 TCR (V beta 8.1-3 T cell receptors) of mice having the b haplotype of the Tcrb gene complex (e.g., AKR, BALB/c, C3H, C57BL, DBA/1, DBA/2). The TCR is expressed on the surface of T lymphocytes and is responsible for recognizing fragments of antigen as peptides bound to MHC molecules. When the TCR engages with antigenic peptide and MHC the T lymphocyte is activated through signal transduction. The F23.1 antibody has been shown to activate V β 8 TCR-expressing T lymphocytes, as well as block cytotoxicity mediated by V β 8 TCR-expressing cytotoxic T lymphocytes. Additionally, in vivo treatment of neonatal mice with the F23.1 antibody can arrest intrathymic maturation of V β 8 TCR-expressing T cells.

Keywords V beta 8.1 T cell receptor;V β 8 TCR;TCRVB8

GENE INFORMATION

References Bothur, E., et al. (2015). "Antigen receptor-mediated depletion of FOXP3 in induced regulatory T-lymphocytes via PTPN2 and FOXO1." *Nat Commun* 6(8576): doi:10.1038/ncomms9576. PubMed;