



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 Vβ 8.1, Vβ 8.2, and Vβ 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 Vβ 8 TCR-expressing T lymphocytes, as well as block cytotoxicity mediated by Vβ 8 TCR-expressing cytotoxic T lymphocytes. Additionally, in vivo treatment of neonatal mice with the F23.1 antibody can arrest intrathymic maturation of Vβ 8 TCR-expressing T cells.
Keywords	V beta 8.1 T cell receptor;Vβ8 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;
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