



Anti-TCR Gamma/Delta monoclonal antibody, clone HM4 [FITC] (DCABY-203)

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

PRODUCT INFORMATION

Antigen Description	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.
Specificity	Hamster anti Mouse TCR Gamma/Delta antibody, clone HM4 reacts with mouse TCR gamma/delta expressing lymphocytes. Hamster anti Mouse TCR Gamma/Delta antibody, clone HM4 has been shown to have depleting activity in vivo.
Immunogen	C57BL/6J intra epithelial lymphocytes
Isotype	IgG
Source/Host	Armenian Hamster
Species Reactivity	Mouse
Clone	HM4
Conjugate	FITC
Applications	Flow Cytometry
Preparation	Purified IgG prepared by affinity chromatography on Protein A
Procedure	Conjugated Antibodies
Format	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid.
Size	100 µg
Buffer	Phosphate buffered saline
Preservative	0.09% Sodium Azide; 0.5% Bovine Serum Albumin
Storage	Store at +4°C or at -20°C if preferred. This product should be stored undiluted. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

GENE INFORMATION

Gene Name	Cd3d CD3 antigen, delta polypeptide [Mus musculus (house mouse)]
Official Symbol	TCR Gamma/Delta
Synonyms	TCR Gamma/Delta; T-cell receptor gamma/delta; T3d; T-cell surface glycoprotein CD3 delta chain; T-cell receptor T3 delta chain
Entrez Gene ID	12500
mRNA Refseq	NM_013487
Protein Refseq	NP_038515
UniProt ID	P04235
Chromosome Location	9 A5.2; 9 24.84 cM
Pathway	Adaptive Immune System; Chagas disease (American trypanosomiasis); Costimulation by the CD28 family; Downstream TCR signaling; Generation of second messenger molecules; HTLV-I infection; Hematopoietic cell lineage; Immune System; Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell; Measles; PD-1 signaling; Phosphorylation of CD3 and TCR zeta chains; Primary immunodeficiency; T Cell Receptor Signaling Pathway; T cell receptor signaling pathway; TCR signaling; Translocation of
Function	protein binding;protein heterodimerization activity;transmembrane signaling receptor activity
References	<ol style="list-style-type: none">1. Skarstein, K. et al. (1994) Oligoclonality of T cells in salivary glands of autoimmune MRL/lpr mice. <i>Immunology</i> 81: 497-501.2. Van der Heyde, H. C. et al. (1995) Gamma/delta T cells function in cell mediated immunity to acute blood-stage plasmodium chabaudi adami Malaria. <i>J. Immunol.</i> 154: 3985 - 3990.3. Skeen, M. J. and Ziegler, H.K. (1993) Induction of murine peritoneal gamma/delta T cells and their role in resistance to bacterial infection. <i>J. Exp. Med.</i> 178: 971 - 984.4. Karasova, D. et al. (2010) Influence of 5 major Salmonella pathogenicity islands on NK cell depletion in mice infected with Salmonella enterica serovar Enteritidis. <i>BMC Microbiol.</i> 10: 75.5. Kinoshita, N. et al. (2002) Autocrine IL-15 mediates intestinal epithelial cell death via the activation of neighboring intraepithelial NK cells. <i>J Immunol.</i> 169: 6187-92.6. Laky, K. et al. (2000) Enterocyte expression of interleukin 7 induces development of gammadelta T cells and Peyer's patches. <i>J Exp Med.</i> 191: 1569-80.7. Skelsey, M.E. et al. (2001) Gamma delta T cells are needed for ocular immune privilege and corneal graft survival. <i>J Immunol.</i> 166: 4327-33.