

Product datasheet for AM08059PU-N

OriGene Technologies, Inc.

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T Cell Receptor (TCR) gamma/delta Hamster Monoclonal Antibody [Clone ID: UC7-13D5]

Product data:

Product Type: Primary Antibodies

Clone Name: UC7-13D5

Applications: FC

Recommended Dilution: Flow Cytometry.

This clone as has also been described to work in Immunoprecipitation Bluestone, J.A., et al.

1991. Immunol. Rev. 120:5).

Reactivity: Mouse Hamster

Isotype: IgG

Clonality: Monoclonal

Specificity: This Monoclonal antibody is specific to the *gamma-delta* heterodimer and plate-bound UC7-

13D5 activates gamma-delta TCR-bearing cells.

It does not react with *alpha-beta* TCR-expressing T cells.

(Davis, M.M. 1990. Annu. Rev. Biochem. 59:475. Allison, J.P., and W.L. Havran. 1991. Annu. Rev. Immunol. 9:679. Klausner, R.D., and L.E. Samuelson. 1991. Cell 64:875. Dent, A.L., et al.

1990. Nature 343:714.)

Formulation: 100 mM Borate Buffered Saline, pH 8.2.

No preservatives or amine-containing buffer salts added.

State: Purified

State: Liquid purified Ig fraction.

Concentration: lot specific

Conjugation: Unconjugated

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.



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Background:

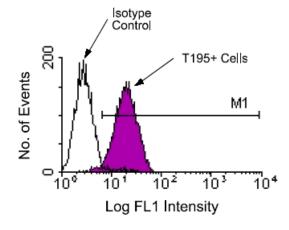
T cell receptors (TCR) recognize foreign antigens which have been processed as small peptides and bound to major histocompatibility complex (MHC) molecules at the surface of antigen presenting cells (APC). Each T cell receptor is a dimer consisting of one alpha and one beta chain or one delta and one gamma chain. This region represents the germline organization of the T cell receptor beta locus. The beta locus includes V (variable), J (joining), diversity (D), and C (constant) segments. During T cell development, the beta chain is synthesized by a recombination event at the DNA level joining a D segment with a J segment; a V segment is then joined to the D-J gene. The C segment is later joined by splicing at the RNA level.

The TCR gamma/delta heterodimer of the CD3/T-cell receptor complex is clonotypic and consists of Ig-like variable and constant domains. (Ref.1) It is expressed during thymopoiesis and on the small subpopulation of gamma/delta TCR expressing T lymphocytes in the periphery. The majority of T cells present in some epithelial tissues are gamma/delta+ and have limited receptor diversity. (Ref.1,2) The TCR gamma/delta heterodimer recognizes peptide antigen bound to MHC antigens, and subsequent signal transduction mediated by the invariant chains leads to T cell activation. (Ref.3)

Synonyms:

TCRG, TCRD, T-Cell Receptor gamma, T-Cell Receptor delta, T-Cell Receptor gamma delta

Product images:



Immunofluorescent Staining: The T195 T-cell line was first incubated with purified Hamster anti-Mouse TCRgamma/delta and then stained with Mouse anti-Hamster IgG-FITC. Large cells were gated and analyzed by flow cytometry. Amount Used: 3 g/10e6 cells.