

Mouse Anti-TCR γ/δ (TCR gamma/delta) [H41]: MC0370, MC0370RTU7

Intended Use: For Research Use Only

Description: T-cell receptor (TCR), a heterodimer composed of either α and β or γ and δ chains, recognizes foreign antigens and translates such recognition events into intracellular signals that elicit a change in the cell from a dormant to an activated state. TCR recognition of self-peptides has been linked to autoimmune disease. Mutant self-peptides have been associated with tumors. Most human T cells (95%) express the α/β or either CD4 or CD8 molecule (single positive, SP), while 2-5% express the γ/δ . However, a small number of T cells lack both CD4 and CD8 (double negative, DN). T helper cells express CD4 proteins and T cytotoxic cells display CD8. Increased percentages of α/β DN T cells have been identified in some autoimmune and immunodeficiency disorders. γ/δ T cells are primarily found within the epithelium. They show less TCR diversity and recognize antigens differently than α/β T cells. Subsets of γ/δ T cells have shown antitumor and immunoregulatory activity.

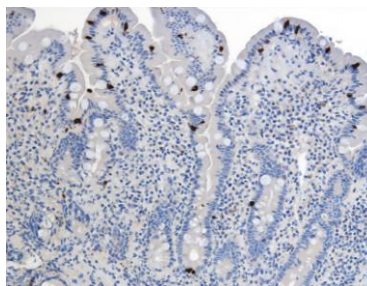
Specifications:

Clone: H41
 Source: Mouse
 Isotype: IgG1k
 Reactivity: Human
 Immunogen: Recombinant human TCR delta
 Localization: Membrane
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, ELISA, IP, WB
 Package:

Description	Catalog No.	Size
TCR γ/δ (TCR gamma/delta) Concentrated	MC0370	1 ml
TCR γ/δ (TCR gamma/delta) Prediluted	MC0370RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Tonsil, small intestine
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human villi stained with anti-TCR γ/δ using DAB

References:

1. Perforins Expression by Cutaneous Gamma Delta T Cells. Katelyn O'Neill, et al. Front. Immunol., 14 August 2020.
2. Detection and Diagnostic Utility of T-cell Receptor Delta Chain in Lymphoid Neoplasm. Alexander Chan, et al. Memorial Sloan Kettering Cancer Center. USCAP, 2017.
3. The promise of $\gamma\delta$ T cells and the $\gamma\delta$ T cell receptor for cancer immunotherapy. Mateusz Legut, et al. Nature cellular & molecular immunology. 13 April 2015.

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Rev. A