

For Research Use Only

# TCR $\alpha$ / $\beta$ Recombinant monoclonal antibody

Catalog Number: 87509-1-RR



## Basic Information

Catalog Number:

87509-1-RR

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

EG9184

GenBank Accession Number:

GeneID (NCBI):

Full Name:

Observed MW:

35 kDa

Purification Method:

Protein A purification

CloneNo.:

252782H5

Recommended Dilutions:

WB: 1:1000-1:4000

IHC: 1:500-1:2000

## Applications

Tested Applications:

WB, IHC, ELISA

Species Specificity:

human, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

Positive Controls:

WB : Jurkat cells, HuT 78 cells, rat thymus tissue

IHC : human tonsillitis tissue,

## Background Information

TCR  $\alpha$  /  $\beta$  (T-cell receptor  $\alpha$  /  $\beta$  heterodimer) is a core molecule of the adaptive immune system, formed by the disulfide bond linkage of  $\alpha$  and  $\beta$  transmembrane polypeptide chains. It is present on the surface of most mature T cells and non-covalently associates with the CD3 complex to form the complete T-cell receptor (TCR-CD3 complex). Its primary function is to recognize antigen peptides presented by major histocompatibility complex (MHC) molecules. The genes encoding TCR  $\alpha$  /  $\beta$  undergo V(D)J recombination, generating an extraordinarily high degree of diversity, enabling the immune system to recognize a vast array of antigens. TCR  $\alpha$  /  $\beta$  plays a decisive role in T-cell development, activation, clonal selection, and immune responses, making it a fundamental target in immunology research and a key molecule in tumor immunotherapy, such as TCR-T therapy.

## Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

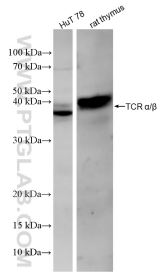
T: 4006900926

E: Proteintech-CN@ptglab.com

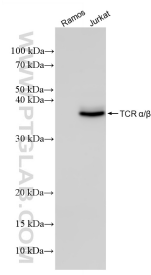
W: ptgcn.com

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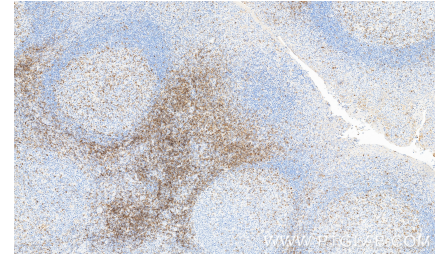
## Selected Validation Data



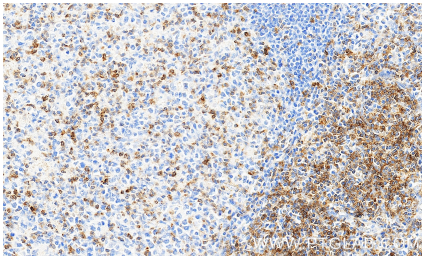
Various lysates were subjected to SDS PAGE followed by western blot with 87509-1-RR (TCR  $\alpha/\beta$  antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



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Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 87509-1-RR (TCR  $\alpha/\beta$  antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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