

# **TCR alpha Antibody**

Rabbit Polyclonal Antibody Catalog # ABV11031

# **Specification**

# **TCR alpha Antibody - Product Information**

Application
Primary Accession
Reactivity
Host
Clonality
Isotype

Calculated MW

O6ISU1
Human, Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
29266

WB, IHC, IP

# **TCR alpha Antibody - Additional Information**

**Gene ID 171558** 

Application & Usage

Western blotting (0.5-4  $\mu$ g/ml). Based on researcher's feedback, it can also be used in immunoprecipitation (10-20  $\mu$ g/ml); and Immunohistochemistry (15-25  $\mu$ g/ml). However, the optimal concentrations should be determined individually. The antibody recognizes TCR  $\alpha$  in human sample, and to a lesser extent to mouse and rat samples. Jurkat cell lysate can be used as a positive control.

# **Other Names**

T cell antigen receptor, T cell receptor alpha, TCRA, TCRD

Target/Specificity

**TCRa** 

**Antibody Form** 

Liquid

**Appearance** 

Colorless liquid

#### **Formulation**

 $100 \mu g$  (0.2 mg/ml) immunoaffinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

# **Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage** 

-20 °C



# **Background Descriptions**

#### **Precautions**

TCR alpha Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **TCR alpha Antibody - Protein Information**

Name PTCRA (HGNC:21290)

### **Function**

Component of the pre-T-cell receptor complex (composed of PTCRA, TCRB and the CD3 complex) that has a crucial role in early T- cell development, particularly alpha-beta T cell differentiation.

### **Cellular Location**

Membrane; Single-pass type I membrane protein. Cell membrane

#### **Tissue Location**

Expressed in immature but not mature T-cells. Also found in CD34+ cells from peripheral blood, CD34+ precursors from umbilical cord blood and adult bone marrow

# **TCR alpha Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# TCR alpha Antibody - Images

# TCR alpha Antibody - Background

TCR (T cell antigen receptor) 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 is a heterodimer composed of either  $\alpha$  and  $\beta$  or  $\gamma$  and  $\delta$  chains. The vast majority of circulating T cells (95%) express the  $\alpha/\beta$  heterodimer while ro  $\mu ghly$  2-5% express the  $\gamma/\delta$  heterodimer. CD3 chains and the CD4 or CD8 coreceptors are also required for efficient signal transduction thro  $\mu gh$  the TCR.