

**TCRGC2 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP55013****Specification****TCRGC2 Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	<a href="#">P03986</a>
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21698

**TCRGC2 Polyclonal Antibody - Additional Information****Other Names**

T cell receptor gamma constant 2 {ECO:0000303|Ref.4}, TRGC2 {ECO:0000303|Ref.4}

**Dilution**

IHC-P~N/A  
IHC-F~N/A  
IF~1:50~200  
ICC~N/A  
E~N/A

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**TCRGC2 Polyclonal Antibody - Protein Information**

**Name** TRGC2 {ECO:0000303|Ref.4}

**Function**

Constant region of T cell receptor (TR) gamma chain that participates in the antigen recognition (PubMed:<a href="http://www.uniprot.org/citations/24600447" target="\_blank">24600447</a>). Gamma-delta TRs recognize a variety of self and foreign non-peptide antigens frequently expressed at the epithelial boundaries between the host and external environment, including endogenous lipids presented by MH-like protein CD1D and phosphoantigens presented by butyrophilin-like molecule BTN3A1. Upon antigen recognition induces rapid, innate-like immune responses involved in pathogen clearance and tissue repair (PubMed:<a href="http://www.uniprot.org/citations/23348415" target="\_blank">23348415</a>, PubMed:<a href="http://www.uniprot.org/citations/28920588" target="\_blank">28920588</a>). Binding of gamma-delta TR complex to antigen triggers phosphorylation of immunoreceptor tyrosine-based activation motifs (ITAMs) in the CD3 chains by the LCK and FYN kinases, allowing the recruitment, phosphorylation, and activation of ZAP70 that facilitates phosphorylation of the scaffolding proteins LCP2 and LAT. This lead to the formation of a supramolecular signalosome that recruits

the phospholipase PLCG1, resulting in calcium mobilization and ERK activation, ultimately leading to T cell expansion and differentiation into effector cells (PubMed:<a href="http://www.uniprot.org/citations/25674089" target="\_blank">25674089</a>).

Gamma-delta TRs are produced through somatic rearrangement of a limited repertoire of variable (V), diversity (D), and joining (J) genes. The potential diversity of gamma-delta TRs is conferred by the unique ability to rearrange (D) genes in tandem and to utilize all three reading frames. The combinatorial diversity is considerably increased by the sequence exonuclease trimming and random nucleotide (N) region additions which occur during the V-(D)-J rearrangements (PubMed:<a href="http://www.uniprot.org/citations/24387714" target="\_blank">24387714</a>).

#### **Cellular Location**

Cell membrane.

#### **TCRGC2 Polyclonal 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 Cytometry](#)
- [Cell Culture](#)

#### **TCRGC2 Polyclonal Antibody - Images**