

CD3G/CD3 gamma
Catalog # PVGS1886**Specification**

CD3G/CD3 gamma - Product Information

Primary Accession [P09693](#)
Species
Human

Sequence
Gln23-Ser116

Purity
> 95% as determined by Bis-Tris PAGE
> 95% as determined by HPLC

Endotoxin Level
Less than 1EU per µg by the LAL method.

Expression System
HEK293

Theoretical Molecular Weight
12.31 kDa

Formulation **Lyophilized from a 0.22 µm filtered solution in PBS₊(pH 7.4).**

Reconstitution
Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.

Storage & Stability
Upon receiving, the product remains stable up to 6 months at -20 °C or below. Upon reconstitution, the product should be stable for 3 months at -80 °C. Avoid repeated freeze-thaw cycles.

CD3G/CD3 gamma - Additional Information

Gene ID 917

Other Names
T-cell surface glycoprotein CD3 gamma chain, T-cell receptor T3 gamma chain, CD3g, CD3G, T3G

Target Background
CD3 gamma, a subunit of the T cell receptor-CD3 (TCR/CD3) complex, helps to support surface TCR/CD3 expression and participates in signal transduction for gene induction after antigen recognition by T lymphocytes, and in TCR/CD3 down-modulation.

CD3G/CD3 gamma - Protein Information

Name CD3G

Synonyms T3G

Function

Part of the TCR-CD3 complex present on T-lymphocyte cell surface that plays an essential role in adaptive immune response. When antigen presenting cells (APCs) activate T-cell receptor (TCR), TCR- mediated signals are transmitted across the cell membrane by the CD3 chains CD3D, CD3E, CD3G and CD3Z. All CD3 chains contain immunoreceptor tyrosine-based activation motifs (ITAMs) in their cytoplasmic domain. Upon TCR engagement, these motifs become phosphorylated by Src family protein tyrosine kinases LCK and FYN, resulting in the activation of downstream signaling pathways (PubMed:2470098). In addition to this role of signal transduction in T-cell activation, CD3G plays an essential role in the dynamic regulation of TCR expression at the cell surface (PubMed:8187769). Indeed, constitutive TCR cycling is dependent on the di-leucine-based (diL) receptor-sorting motif present in CD3G.

Cellular Location

Cell membrane; Single-pass type I membrane protein

CD3G/CD3 gamma - 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](#)

CD3G/CD3 gamma - Images