

CD3G/CD3 gamma

Catalog # PVGS1886

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.

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.

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 CD247/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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.