CD3 gamma Protein, Cynomolgus (P.pastoris, His)

Cat. No.:	HY-P71845
Synonyms:	CD3GT-cell surface glycoprotein CD3 gamma chain; T-cell receptor T3 gamma chain; CD antigen CD3g
Species:	Cynomolgus
Source:	P. pastoris
Accession:	Q95LI7 (23Q-113T)
Gene ID:	102134381
Molecular Weight:	Approximately 12.5 kDa

PROPERTIES

AA Sequence	Q S F E E N R K L N V Y N Q E D G S V L L T C H V K N T N I T W F K E G K M I D I L T A H K N K W N L G S N T K D P R G V Y Q C K G S K D K S K T L Q V Y Y R M C Q N C I E L N A A T
Appearance	Lyophilized powder.
Formulation	Lyophilized after extensive dialysis against solution in Tris-based buffer, 50% glycerol.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	CD3 gamma Protein is an integral part of the TCR-CD3 complex found on the surface of T-lymphocytes, playing a crucial role in adaptive immune response. When T-cell receptors (TCRs) on antigen presenting cells (APCs) are activated, CD3D, CD3E, CD3G, and CD3Z transmit TCR-mediated signals across the cell membrane. Each CD3 chain contains immunoreceptor tyrosine-based activation motifs (ITAMs) in their cytoplasmic domain, which are phosphorylated by LCK and FYN protein tyrosine kinases upon TCR engagement, leading to downstream signaling activation. Apart from signal transduction, CD3G also plays a vital role in regulating TCR expression at the cell surface, particularly through the di-leucine-based (diL) receptor-sorting motif present in CD3G that influences constitutive TCR cycling. The TCR-CD3 complex consists of CD3D/CD3E and CD3G/CD3E heterodimers that preferentially associate with TCRalpha and TCRbeta, respectively, forming TCRalpha/CD3E/CD3G and TCRbeta/CD3G/CD3E trimers. These trimers then interact with CD3Z homodimer to form the complete TCR-CD3 complex. Alternatively, TCRgamma and TCRdelta can replace TCRalpha and TCRbeta in this complex.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA