

Cynomolgus FCGRT & B2M Heterodimer Protein

Catalog Number: CT031-C08H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

FCGRT & B2M

Protein Construction:

A DNA sequence encoding the extracellular domain (Met 1-Ser 297) of cynomolgus FCGRT (Q8SPV9) was fused with a polyhistidine tag at the C-terminus, constructed the plasmid 1; A DNA sequence encoding the cynomolgus B2M (Q8SPW0) (Met 1-Met 119) constructed the plasmid 2. The two plasmids were co-expressed and the FCGRT/B2M heterodimer was purified.

Source: Cynomolgus

Expression Host: HEK293 Cells

QC Testing

Purity: ≥ 95 % as determined by SDS-PAGE. ≥ 90 % as determined by SEC-HPLC. ≥ 90 % as determined by SEC-MALS (Routinely tested).

Bio Activity:

1. Loaded Cynomolgus FcRn recombinant protein (Cat. CT031-C08H) on His1K Biosensor, can bind IgG1 Fc (Cat. 10702-HNAC) with an affinity constant of 0.032 μ M as determined in a BLI assay (Sartorius Octet Red384) (Routinely tested).

2. Captured Cynomolgus FcRn recombinant protein (Cat. CT031-C08H) on Anti-His Chip can bind Anti-VEGF (Research Grade Bevacizumab Biosimilar) (IgG1) with an affinity constant of 0.09 μ M as determined in an SPR assay (Biacore T200) (Routinely tested).

3. Captured Cynomolgus FcRn recombinant protein (Cat. CT031-C08H) on Anti-His Chip can bind Anti-PD1 (Research grade Nivolumab biosimilar) (IgG4) with an affinity constant of 0.18 μ M as determined in an SPR assay (Biacore T200) (Routinely tested).

4. Recombinant Cynomolgus FCGRT & B2M Heterodimer Protein (Cat: CT031-C08H) captured on CM5 chip via Anti-His antibody, can bind anti-ERBB2 (Research grade trastuzumab biosimilar) with an affinity constant of 1.290 μ M as determined in an SPR assay (Biacore 8K) (Routinely tested).

Endotoxin:

< 1.0 EU per μ g of the protein as determined by the LAL method

Predicted N terminal: Ala 24 & Ile 21

Molecular Mass:

The recombinant heterodimer of cynomolgus FCGRT&B2M comprises 384 (285+99) amino acids and has a calculated molecular mass of 43.5 (31.9+11.6) KDa. The apparent molecular mass of cynomolgus FCGRT&B2M heterodimer is approximately 35 & 12 KDa respectively in SDS-PAGE. The molecular weight of this protein is around 40-60 kDa verified by SEC-MALS (Routinely tested).

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:

