Data Sheet (Cat.No.TMPK-00240)

TargetMol

CD64 Protein, Human, Recombinant (His & Avi)

General Information

Synonyms:	FcgRI;IGFR1;FCE1A;FCGR1A;Fc-γ RIA;Fc gamma RI;Fc-gamma RIA;Fcgr;Fcr;Fc γ RI;Fc γ RI/CD64;FCG1;FcERI;FcRIA;FCGR1;FLJ18345;FCRI;CD64a;CD64
Protein Construction:	Gln16-Pro288
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P12314-1
Molecular Weight:	33.5 kDa (predicted). Due to glycosylation, the protein migrates to 50-70 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	Human Fc gamma RI, His Tag captured on CM5 Chip via anti-his antibody can bind Trastuzumab with an affinity constant of 1.94 nM as determined in SPR assay.
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

The Fc gamma Rs have been divided into three classes based on close relationships in their extracellular domains; these groups are designated Fc gamma RI (also known as CD64), Fc gamma RII (CD32), and Fc gamma RIII (CD16). Each group may be encoded by multiple genes and exist in different isoforms depending on species and cell type.

Reference

Nimmerjahn F, Ravetch J V. Fcγ receptors as regulators of immune responses[J]. Nature Reviews Immunology, 2008, 8(1):34-47.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481