Data Sheet (Cat.No.TMPY-03055)

TargetMol

LYG1 Protein, Human, Recombinant (His)

General Information

Synonyms:	SALW1939;lysozyme G-like 1
Protein Construction:	A DNA sequence encoding the human LYG1 (Met 1-Phe194) (Q8N1E2) was expressed, with a C-terminal polyhistidine tag. Predicted N terminal: Ser 2
Species:	Human
Expression Host:	Baculovirus Insect Cells
Accession:	Q8N1E2
Molecular Weight:	20.82 kDa (predicted); 22 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90 % as determined by SDS-PAGE
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 20 mM Tris, 500 mM NaCl, pH 7.4, 20% gly. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

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.

Shipping:

In general, Lyophilized powders are shipping with blue ice.

Protein Background

LYG1 (Lysozyme G1) is a Protein Coding gene. It belongs to the glycosyl hydrolase 23 family. Glycoside hydrolases are a widespread group of enzymes that hydrolyze the glycosidic bond between two or more carbohydrates, or between a carbohydrate and a non-carbohydrate moiety. LYG1 exhibits hydrolase activity, acting on glycosyl bonds (inferred); lysozyme activity (inferred). It is found in the extracellular region and may function in the cell wall macromolecule catabolic process, metabolic process, and peptidoglycan catabolic process. The lysozyme G

gene structure has been largely conserved during vertebrate evolution, except at the 5' end of the gene, which varies in some exons.

Reference

EIrwin DM, et al. (2003) Molecular evolution of vertebrate goose-type lysozyme genes. J Mol Evol. 56(2):234-42.
Gerhard DS, et al. (2004) The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Genome Res. 14(10B):2121-7.
Sklar P, et al. (2011) Large-scale genome-wide association analysis of bipolar disorder identifies a new susceptibility locus near ODZ4. Nat Genet. 43(10):977-83.

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