Data Sheet (Cat.No.TMPY-03353)

TargetMol

CEL Protein, Mouse, Recombinant (His)

General Information

Synonyms:	1810036E18Rik;carboxyl ester lipase;BAL
Protein Construction:	A DNA sequence encoding the mouse CEL (NP_034015.1) (Met1-Leu534) was expressed with a C-terminal polyhistidine tag. Predicted N terminal: Ala 21
Species:	Mouse
Expression Host:	Baculovirus Insect Cells
Accession:	Q3V2H7
Molecular Weight:	58.2 kDa (predicted); 133.9 and 59.1 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, 10% glycerol, pH 7.4. 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.

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

CEL-maturity onset diabetes of the young (MODY), diabetes with pancreatic lipomatosis and exocrine dysfunction, is due to dominant frameshift mutations in the acinar cell carboxyl ester lipase gene (CEL). Bile-salt activated carboxylic ester lipase (CEL) is a major triglyceride, cholesterol ester and vitamin ester hydrolytic enzyme contained within pancreatic and lactating mammary gland secretions. Carboxyl ester lipase is a digestive pancreatic enzyme encoded by the CEL gene. Mutations in CEL cause maturity-onset diabetes of the young as well

as pancreatic exocrine dysfunction. The enzyme carboxyl ester lipase (CEL), also known as bile salt-dependent or -stimulated lipase (BSDL, BSSL), hydrolyzes dietary fat, cholesteryl esters and fat-soluble vitamins in the duodenum. CEL is mainly expressed in pancreatic acinar cells and lactating mammary glands. The human CEL gene resides on chromosome 9q34.3 and contains a variable number of tandem repeats (VNTR) region that encodes a mucin-like protein tail.

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