# Mouse CEL / Bile salt-activated lipase Protein (His Tag)

Catalog Number: 50583-M08B



## **General Information**

### Gene Name Synonym:

1810036E18Rik: BAL

#### **Protein Construction:**

A DNA sequence encoding the mouse CEL (NP\_034015.1) (Met1-Leu534) was expressed with a C-terminal polyhistidine tag.

Source: Mouse

Expression Host: Baculovirus-Insect Cells

**QC** Testing

Purity: > 90 % as determined by SDS-PAGE

**Endotoxin:** 

 $< 1.0 \; EU \; per \; \mu g$  of the protein as determined by the LAL method

Predicted N terminal: Ala 21

#### Molecular Mass:

The recombinant mouse CEL comprises 525 amino acids and has a predicted molecular mass of 58.2 kDa. The apparent molecular mass of the protein is approximately 133.9 and 59.1 kDa in SDS-PAGE under reducing conditions due to glycosylation.

## Formulation:

Lyophilized from sterile 20 mM Tris, 500 mM NaCl, 10 % glycerol, 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.

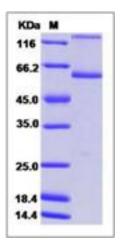
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

## Reconstitution:

Detailed reconstitution instructions are sent along with the products.

#### SDS-PAGE:



# **Protein Description**

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.