Mouse GPA33 / Glycoprotein A33 Protein (His Tag)

Catalog Number: **50559-M08H**

General Information

Gene Name Synonym:

2010310L10Rik; 2210401D16Rik; BB116197

Protein Construction:

A DNA sequence encoding the mouse GPA33 (NP_067623.1) extracellular domain (Met 1-Ile 235) was expressed, with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

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

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Leu 22

Molecular Mass:

The secreted recombinant mouse GPA33 consists of 225 amino acids and has a predicted molecular mass of 25.4 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rmGPA33 is approximately 35-40 kDa due to glycosylation.

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

Storage:

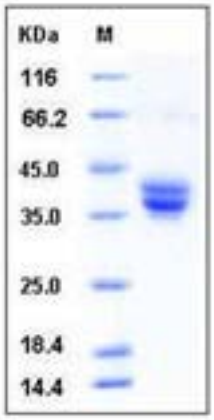
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Cell surface A33 antigen, also known as glycoprotein A33, is a single-pass type I membrane protein which is expressed in normal gastrointestinal epithelium and in 95% of colon cancers. GPA33 contains oneIg-like C2-type (immunoglobulin-like) domain and oneIg-like V-type (immunoglobulin-like) domain. The open reading frame encodes a 319-amino acid polypeptide having a putative secretory signal sequence and 3 potential glycosylation sites. The predicted mature protein has a 213-amino acid extracellular region, a single transmembrane domain, and a 62-amino acid intracellular tail. Intracellular traffic and recycling to the cell surface appear to play a major role in GPA33 function and to have an influence on its surface density superseding translational regulation. GPA33 has become a promising target of immunologic therapy strategies, but its biologic function and potential role in tumorigenesis are unknown. EpCAM protein and GPA33 mRNA expressions are specific and sensitive markers of Barrett's metaplasia (BM). GPA33 may also play a role in cell-cell recognition and signaling.

References

1.Heath J.K., et al., 1997, Proc. Natl. Acad. Sci. USA. 94:469-74. 2.Ritter G., et al., 1997, Biochem. Biophys. Res. Commun. 236:682-6. 3.Frey,D. et al., 2008, Cancer Biother Radiopharm 23 (1):65-73.