## Recombinant Mouse GPA33/Glycoprotein A33 Protein (His Tag)

## Catalog Number: PKSM040615

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Mouse
Source	HEK293 Cells-derived Mouse GPA33/Glycoprotein A33 protein Met 1-Ile 235, with an
	C-terminal His
Calculated MW	25.4 kDa
Observed MW	35-40 kDa
Accession	NP_067623.1
Bio-activity	Not validated for activity
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants
	before lyophilization.
	Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.
Data	
ł	KDa MK R
	116
(	56.2
2	45.0
3	35.0
2	25.0
-	18.4

> 95 % as determined by reducing SDS-PAGE.

14.4

## Background

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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.