



Recombinant Protein Technical Manual

**Recombinant Mouse GPA33/Glycoprotein A33
Protein (His Tag)**
RPES2292

Product Data:

Product SKU: RPES2292

Size: 20µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_067623.1

Protein Information:

Molecular Mass: 25.4 kDa

AP Molecular Mass: 35-40 kDa

Tag: C-His

Bio-activity:

Purity: > 95 % as determined by SDS-PAGE

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

Storage: 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°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

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: 2010310L10Rik;2210401D16Rik;BB116197

Immunogen Information:

Sequence: Met 1-Ile 235

Background:

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 one Ig-like C2-type (immunoglobulin-like) domain and one Ig-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.