



Recombinant Protein Technical Manual

Recombinant Human PGA4/Pepsinogen A Protein (His Tag)(Active) RPES1341

Product Data:

Product SKU: RPES1341

Size: 10µg

Species: Human

Expression host: HEK293 Cells

Uniprot: P00790

Protein Information:

Molecular Mass: 41.7 kDa

AP Molecular Mass: 45 kDa

Tag: C-His

Bio-activity: Measured by its ability to cleave the fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK(Dnp)-NH₂, AnaSpec, Catalog # 27114. The specific activity is > 10,000 pmoles/min/µg. (Activation description: The enzyme achieves its activity under acidic pH)

Purity: > 97 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg 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: FLJ58952; FLJ77962; PGA3; PGA4; PGA5

Immunogen Information:

Sequence: Met 1-Ala 388

Background:

PGA4 (Pepsinogen 4, group I), or Pepsinogen A, is a member of the peptidase A1 family. Pepsin is expressed as a pro-form zymogen, pepsinogen, whose primary structure has an additional 44 amino acids. Pepsin is stored as pepsinogen so it will only be released when needed, and does not digest the body's own proteins in the stomach's lining. Five types of zymogens of pepsins, gastric digestive proteinases, are known: pepsinogens A, B, and F, progastricsin, and prochymosin. There are two major groups of pepsinogen, namely pepsinogen A (PGA) and pepsinogen C (PGC) (or progastricsin), and each frequently has isozymogens. The PGA3, PGA4 and PGA5 genes encode identical human pepsinogen A enzymes.