

## Recombinant Human PGA4/Pepsinogen A Protein (His Tag)

Catalog No. PKSH030741

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

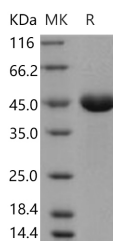
### Description

<b>Synonyms</b>	FLJ58952;FLJ77962;PGA3;PGA4;PGA5
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met 1-Ala 388
<b>Accession</b>	NP-001073276.1
<b>Calculated Molecular Weight</b>	41.7 kDa
<b>Observed molecular weight</b>	45 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Measured by its ability to cleave the fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK(Dnp)-NH <sub>2</sub> , AnaSpec, Catalog # 27114. The specific activity is > 10,000 pmoles/min/μg. (Activation description: The enzyme achieves its activity under acidic pH)

### Properties

<b>Purity</b>	> 97 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per μg of the protein as determined by the LAL method.
<b>Storage</b>	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°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 97 % as determined by reducing SDS-PAGE.

### For Research Use Only

## 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.

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