

# Human GPR37 Protein (His Tag)

Catalog Number: 13496-H08H



**Sino Biological Inc.**  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

EDNRBL; hET(B)R-LP; PAELR; AI848630; Pael-R

### Protein Construction:

A DNA sequence encoding the human GPR37 (NP\_005293.1) the first extracellular domain (Met 1-Met 265) was fused with a polyhistidine tag at the C-terminus.

**Source:** Human

**Expression Host:** Human Cells

## QC Testing

**Purity:** > 80 % 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 °C

**Predicted N terminal:** Ala 27

### Molecular Mass:

The secreted recombinant human GPR37 comprises 250 amino acids and has a predicted molecular mass of 26.6 kDa. The apparent molecular mass of rh GPR37 is approximately 30-45 kDa in SDS-PAGE under reducing conditions due to different 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:

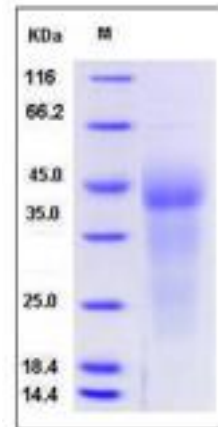
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

GPR37 (cathepsin Z) is an orphan receptor which belongs to the G-protein coupled receptor 1 family. G protein coupled receptors is a large protein family comprised by transmembrane receptors that sense molecules outside the cell and activate inside signal transduction pathways and, ultimately, cellular responses. They only exist in eukaryotes, including yeast, choanoflagellates, and animals. These receptors are bound and activated by light-sensitive compounds, odors, pheromones, hormones, and neurotransmitters. These ligands vary in size from small molecules to peptides to large proteins. G protein-coupled receptors are involved in many diseases, and are also the target of approximately 40% of all modern medicinal drugs. GPR37 is expressed in brain and spinal cord, and at lower levels in testis, placenta and liver, but no detectable expression observed in any other tissue. GPR37 may have a unique functional role in the central nervous system.

## References

1. Marazziti D, *et al.* (1997) Cloning of GPR37, a gene located on chromosome 7 encoding a putative G-protein-coupled peptide receptor, from a human frontal brain EST library. *Genomics*. 45(1):68-77.
2. Imai, *et al.* (2002) CHIP is associated with Parkin, a gene responsible for familial Parkinson's disease, and enhances its ubiquitin ligase activity. *Mol Cell*. 10(1):55-67.
3. Imai, *et al.* (2001) An unfolded putative transmembrane polypeptide, which can lead to endoplasmic reticulum stress, is a substrate of Parkin. *Cell*. 105(7):891-902.

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