

## Recombinant Human PTH1R Protein (Gly49, His Tag)

Catalog No. PKSH032853

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

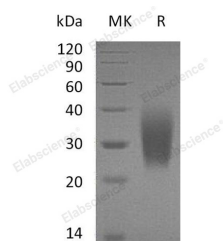
### Description

<b>Synonyms</b>	Parathyroid hormone/parathyroid hormone-related peptide receptor;PTH/PTHrP type I receptor;PTH/PTHr receptor;Parathyroid hormone 1 receptor;PTH1 receptor;PTH1R
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Tyr23-Met 189
<b>Accession</b>	Q0VGD7
<b>Calculated Molecular Weight</b>	20.2 kDa
<b>Observed molecular weight</b>	30 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % 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 a 0.2 µm filtered solution of 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



> 95 % as determined by reducing SDS-PAGE.

### Background

#### For Research Use Only

Parathyroid hormone 1 receptor(PTH1R) is a multi-pass membrane protein. The protein is expressed in high levels in bone and kidney and regulates calcium ionhomeostasis through activation of adenylate cyclase and phospholipase C. In bone, it is expressed on the surface of osteoblasts. When the receptor is activated through PTH binding, osteoblasts express RANKL (Receptor Activator of Nuclear Factor kB Ligand), which binds to RANK (Receptor Activator of Nuclear Factor kB) on osteoclasts. This turns on osteoclasts to ultimately increase the resorption rate.