

## Recombinant Human IGF1R/CD221/IGF-I R protein (His Tag)

Catalog Number: PDEH100946

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

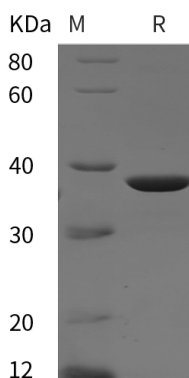
### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human IGF1R protein Asp741-Asn1036, with an N-terminal His
<b>Calculated MW</b>	32.5 kDa
<b>Observed MW</b>	38 kDa
<b>Accession</b>	P08069
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 10 EU/mg 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 in PBS with 5% Trehalose and 5% Mannitol.
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

The insulin-like growth factor-1 receptor (IGF1R) is a transmembrane tyrosine kinase involved in several biological processes including cell proliferation, differentiation, DNA repair, and cell survival. This is a disulfide-linked heterotetrameric transmembrane protein consisting of two  $\alpha$  and two  $\beta$  subunits, and among which, the  $\alpha$  subunit is extracellular while the  $\beta$  subunit has an extracellular domain, a transmembrane domain and a cytoplasmic tyrosine kinase domain. The IGF-I receptor is highly expressed in all cell types and tissues. Essentially all of the biological activities of IGF-I and II have been shown to be mediated via IGF-I R. IGF1R is an important signaling molecule in cancer cells and plays an essential role in the establishment and maintenance of the transformed phenotype. Inhibition of IGF1R signaling thus appears to be a promising strategy to interfere with the growth and survival of cancer cells, is now an attractive anti-cancer treatment target.

### For Research Use Only