

# Human OSMR beta Protein

Cat. No. OSM-HM101

## Description

<b>Source</b>	Recombinant Human OSMR beta Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Glu28-Met740.
<b>Accession</b>	Q99650-1
<b>Molecular Weight</b>	The protein has a predicted MW of 82.2 kDa. Due to glycosylation, the protein migrates to 110-140 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

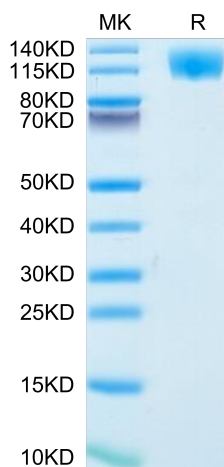
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

OSMR is targeted to the mitochondrial matrix via the presequence translocase-associated motor complex components, mtHSP70 and TIM44. OSMR interacts with NADH ubiquinone oxidoreductase 1/2 (NDUFS1/2) of complex I and promotes mitochondrial respiration. Deletion of OSMR impairs spare respiratory capacity, increases reactive oxygen species, and sensitizes BTSCs to IR-induced cell death.

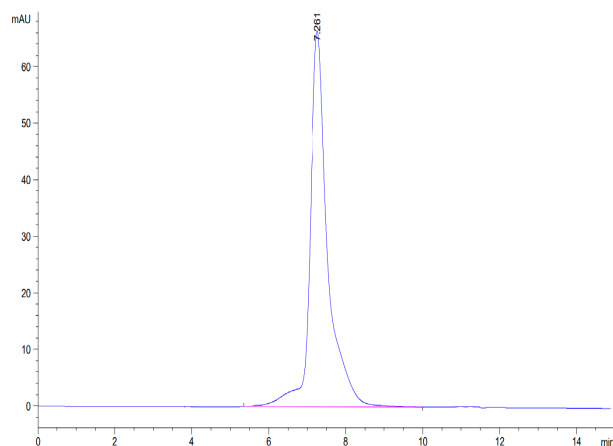
## Assay Data

### Bis-Tris PAGE



Human OSMR beta on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



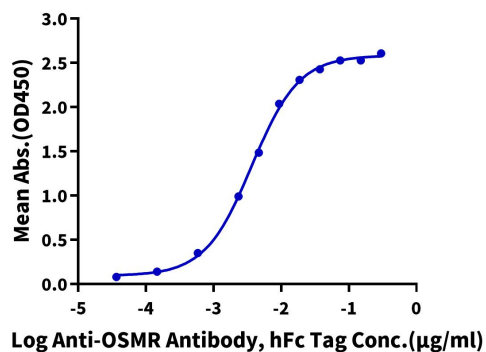
The purity of Human OSMR beta is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

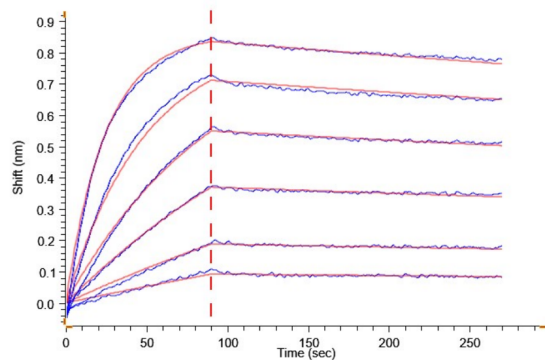
**Human OSMR beta, His Tag ELISA**

0.1µg Human OSMR beta, His Tag Per Well



Immobilized Human OSMR beta, His Tag at 1µg/ml (100µl/Well) on the plate. Dose response curve for Anti-OSMR Antibody, hFc Tag with the EC50 of 3.7ng/ml determined by ELISA.

BLI Data



Loaded Anti-OSMR Ab., hFc-Avi Tag on ProA-Biosensor can bind Human OSMR beta, His Tag with an affinity constant of 2.48 nM as determined in BLI assay (Gator® Prime).