

# Human OSMR Protein

Cat. No. OSM-HM20D



## Description

<b>Source</b>	Recombinant Human OSMR Protein is expressed from HEK293 with hFc tag at the C-terminus. It contains Glu28-Val236.
<b>Accession</b>	Q99650-1
<b>Molecular Weight</b>	The protein has a predicted MW of 49.94 kDa. Due to glycosylation, the protein migrates to 60-80 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

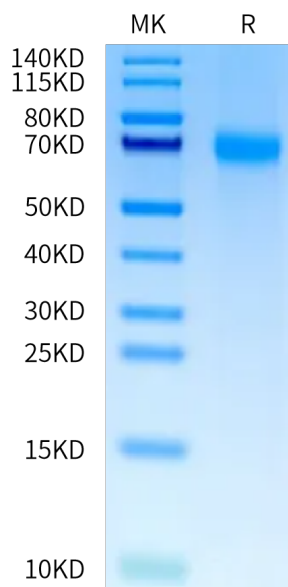
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days 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

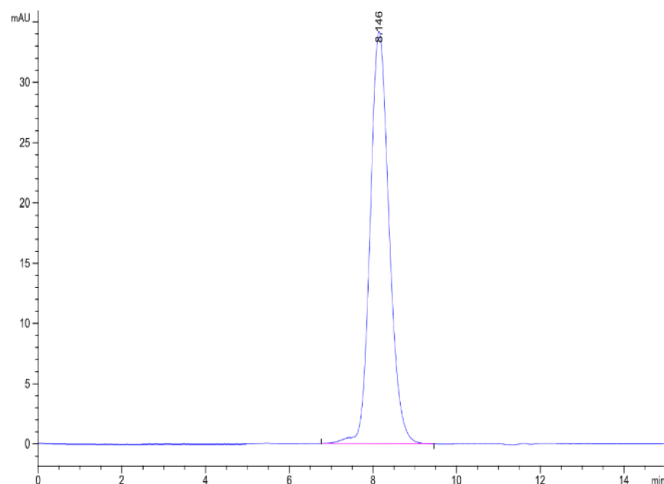
### Bis-Tris PAGE



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

### SEC-HPLC

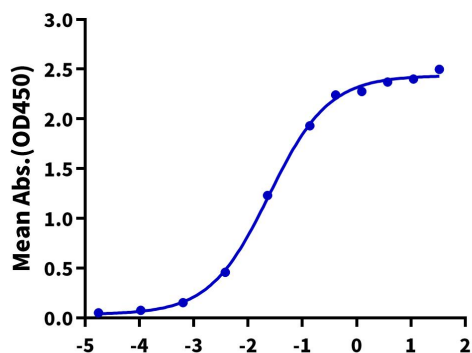
Assay Data



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

ELISA Data

**Human OSMR, hFc Tag ELISA**  
0.5µg Human OSMR, hFc Tag Per Well



Immobilized Human OSMR, hFc Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Anti-OSMR Antibody, hFc Tag with the EC50 of 24.4ng/ml determined by ELISA.