

# Human/Mouse BMPR2 Protein

Cat. No. BMP-HM2R2

## Description

<b>Source</b>	Recombinant Human/Mouse BMPR2 Protein is expressed from HEK293 with hFc tag at the C-terminus. It contains Ser27-Thr150.
<b>Accession</b>	Q13873-1(Human) / O35607(Mouse)
<b>Molecular Weight</b>	The protein has a predicted MW of 39.84 kDa. Due to glycosylation, the protein migrates to 55-70 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ 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>	Supplied as 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4).
<b>Storage</b>	Valid for 12 months from date of receipt when stored at $-80^{\circ}\text{C}$ . Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Bone morphogenetic protein type 2 receptor (BMPR2) is one of the transforming growth factor- $\beta$  (TGF- $\beta$ ) superfamily receptors, performing diverse roles during embryonic development, vasculogenesis, and osteogenesis. Human BMPR2 consists of 1,038 amino acids, and contains functionally conserved extracellular, transmembrane, kinase, and C-terminal cytoplasmic domains. Bone morphogenetic proteins (BMPs) engage the tetrameric complex, composed of BMPR2 and its corresponding type 1 receptors, which initiates SMAD proteins-mediated signal transduction leading to the expression of target genes implicated in the development or differentiation of the embryo, organs and bones.

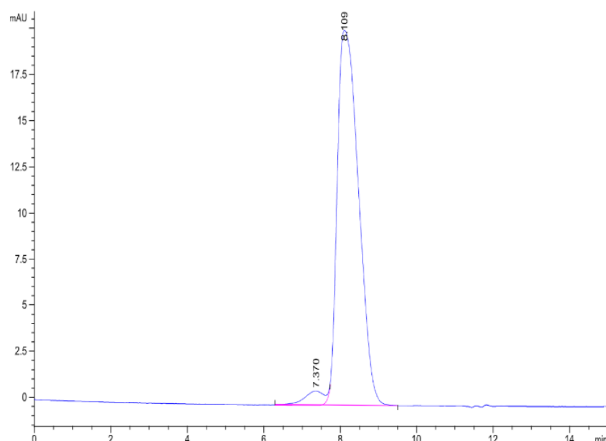
## Assay Data

### Bis-Tris PAGE



Human/Mouse BMPR2 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



The purity of Human/Mouse BMPR2 is greater than 95% as determined by SEC-HPLC.