

Human BMP10 Protein



Cat. No. BMP-HM010

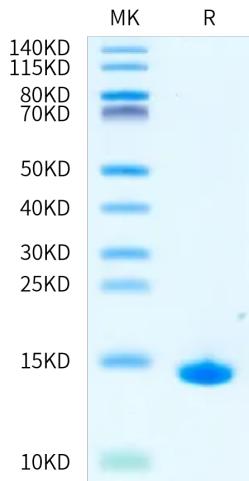
| Description             |                                                                                                                                                                                  |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Source                  | Recombinant Human BMP10 Protein is expressed from HEK293 without tag.<br>It contains Ala317-Arg424.                                                                              |
| Accession               | O95393                                                                                                                                                                           |
| Molecular Weight        | The protein has a predicted MW of 12.16 kDa. Due to glycosylation, the protein migrates to 13-15 kDa based on Bis-Tris PAGE result.                                              |
| Endotoxin               | Less than 0.1 EU per µg by the LAL method.                                                                                                                                       |
| Purity                  | > 95% as determined by Bis-Tris PAGE                                                                                                                                             |
| Formulation and Storage |                                                                                                                                                                                  |
| Formulation             | Supplied as 0.22 µm filtered solution in 4mM HCl.                                                                                                                                |
| Storage                 | Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles. |

**Background**

Bone morphogenetic protein 10 (BMP10) is a cardiac peptide growth factor belonging to the transforming growth factor  $\beta$  superfamily that critically controls cardiovascular development, growth, and maturation. It has been shown that BMP10 elicits its intracellular signaling through a receptor complex of activin receptor-like kinase 1 with morphogenetic protein receptor type II or activin receptor type 2A.

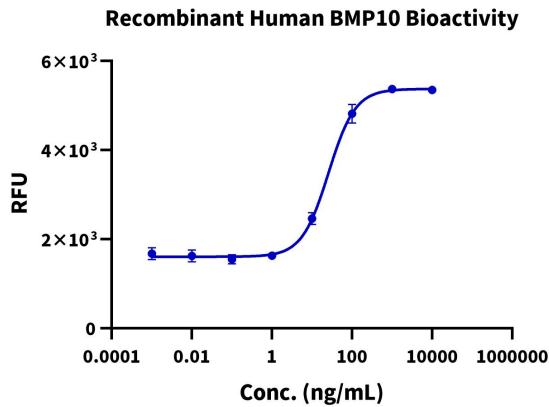
Assay Data

Bis-Tris PAGE



Human BMP10 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

Cell Based Assay



Measured by its ability to induce Alkaline Phosphatase production by ATDC5 mouse chondrogenic cells. The ED50 for this effect is 10-60 ng/mL.