

## Product datasheet

# Recombinant human BMP9 protein (Active) ab94350

### Description

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| <b>Product name</b>                    | Recombinant human BMP9 protein (Active)  |
| <b>Biological activity</b>             | Determined by its ability to induce alkaline phosphatase production by ATDC-5 cells. The expected ED <sub>50</sub> for this effect is 0.5-1.9 ng/ml. |
| <b>Purity</b>                          | > 95 % SDS-PAGE.<br>Purity: Greater than 95% by SDS-PAGE gel and HPLC analyses. Endotoxin level is less than 0.1 ng per µg (1EU/µg).                 |
| <b>Expression system</b>               | CHO cells  |
| <b>Accession</b>                       | <b><u>Q9UK05</u></b>   |
| <b>Protein length</b>                  | Full length protein  |
| <b>Animal free</b>                     | No   |
| <b>Nature</b>                          | Recombinant  |
| <b>Species</b>                         | Human  |
| <b>Sequence</b>                        | SAGAGSHCQK TSLRVNFEDI GWDSWIAPK<br>EYEAYECKGG CFFPLADDVT PTKHAMQTL<br>VHLKFPTKVG KACCVPTKLS PISVLYKDDM<br>GVPTLKYHYE GMSVAECGCR                      |
| <b>Predicted molecular weight</b>      | 24 kDa   |
| <b>Amino acids</b>                     | 320 to 429   |
| <b>Additional sequence information</b> | This product is the mature full length protein from aa 320 to 429. The signal peptide and propeptide are not included.                               |

### Specifications

Our **Abpromise guarantee** covers the use of **ab94350** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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|---------------------|------------------|
| <b>Applications</b> | HPLC<br>SDS-PAGE |
| <b>Form</b>         | Lyophilized      |

### Preparation and Storage

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|------------------------------|---|
| <b>Stability and Storage</b> | Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.<br><br>This product is an active protein and may elicit a biological response in vivo, handle with caution. |
| <b>Reconstitution</b>        | For lot specific reconstitution information please contact our Scientific Support Team.   |

## General Info

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|------------------------------|--|
| <b>Relevance</b>             | BMP9 is a member of the bone morphogenetic protein (BMP) family and the TGF-beta superfamily. They are regulators of cell growth and differentiation. BMP9 has a role in the maturation of BFCN (basal forebrain cholinergic neurons) also inducing and maintaining the ability of these cells to respond to acetylcholine; BFCN are important for the processes of learning, memory and attention. BMP9 is a potent inducer of hepcidin (a cationic peptide that has antimicrobial properties) in hepatocytes and can regulate iron metabolism. The physiological receptor of BMP9 is thought to be activin receptor-like kinase 1, ALK1 (also called ACVRL1), an endothelial-specific type I receptor of the TGF-beta receptor family. BMP9 is one of the most potent BMPs to induce orthotopic bone formation in vivo. BMP3, a blocker of most BMPs seems not to affect BMP9. |
| <b>Cellular localization</b> | Secreted   |

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## Our Abpromise to you: Quality guaranteed and expert technical support

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- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

## Terms and conditions

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