

# CHAMOT

**重组小鼠骨形态发生蛋白-4 /Recombinant BMP-4,  
Mouse, Animal-Free**

**CM049-5MP**

**CM049-20MP**

**CM049-100MP**

**CM049-500MP**

**CM049-1000MP**



**CHAMOT**

乔默®生物

*Specialize In Cytokines*



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## 重组小鼠骨形态发生蛋白-4 /Recombinant BMP-4, Mouse, Animal-Free

产品编号	CM049-5MP	CM049-20MP	CM049-100MP	CM049-500MP	CM049-1000MP
规格	5 µg	20 µg	100 µg	500 µg	1 mg

### 产品简介

#### 背景描述

Bone Morphogenetic Protein-4 (BMP-4) predicts a molecular mass of 13 kDa, is a vital regulatory molecule that functions throughout human development in mesoderm induction, tooth development, limb formation, bone induction, and fracture repair and is overexpressed in patients who have fibrodysplasia ossificans progressiva. BMP-4 is a critical signaling molecule required for the early differentiation of the embryo and establishing of a dorsal-ventral axis. BMP-4 is secreted from the dorsal portion of the notochord, and it acts in concert with sonic hedgehog to establish a dorsal-ventral axis for the differentiation of later structures.

#### 别称

bone morphogenetic protein 4, BMP-2B, DVR4, BMP4

#### 蛋白编码

P21275

#### 分子量

The protein has a calculated MW of 12.88 kDa. The protein migrates as 11-17 kDa under reducing condition (SDS-PAGE analysis).

#### 表达系统

Escherichia coli

#### 纯度

>98% as determined by SDS-PAGE.

#### 生物活性

Measure by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED<sub>50</sub> for this effect is <10 ng/mL. The specific activity of recombinant mouse BMP-4 is > 1 x 10<sup>5</sup> IU/mg.

#### 内毒素检测

<0.1 EU per 1 µg of the protein by the LAL method.

#### 蛋白序列

MKKNKNCRRHSLYVDFSDVGWNDWIVAPPGYQAFYCHGDCPFPLADHLNSTNHAIVQTLV  
NSVNSSIPKACCVPTLSAISMLYLDEYDKVVLKNYQEMVVEGCGCRwith polyhistidine tag at the C-terminus.

#### 产品形式

The protein was lyophilized from a 0.2 µm filtered solution containing 1X PBS, pH 8.0. If you have any concerns or special requirements, please confirm with us.

## 产品使用

1. Before opening, centrifuge at 3000 rpm for 5 mins.

### 2. Initial Reconstitution

- Reconstitute the Lyophilized Protein in sterile H<sub>2</sub>O to a concentration of 100-200 µg/mL.
- Then, incubate it at room temperature for at least 20 mins to ensure sufficient dissolution.

Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

- Store at 2°C to 8°C for up to 1 week.

### 3. Extended Storage

- After the initial reconstitution, further dilute the reconstituted protein in a buffer containing a carrier protein or stabilizer (e.g., 0.1% BSA, 10% FBS, 5% HSA, or 5% trehalose solution). The final concentration is not less than 10 µg/mL.

- Prepare aliquots (≥20 µl).
- Store at -20°C or -80°C for 3 to 6 months.

Avoid repeated freeze-thaw cycles.

## 产品储存/运输

**Lyophilized Protein:** Store at -20°C for 1 year.

### 储存

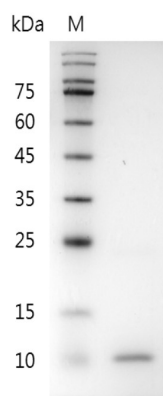
**Initial Reconstitution:** Store at 2°C to 8°C for up to 1 week.

**Extended Storage:** Store at -20°C or -80°C for 3 to 6 months with a carrier protein or stabilizer.

### 运输

Blue Ice

## 实验数据展示



SDS-PAGE analysis of recombinant mouse BMP-4

For Research Use or Further Manufacturing Only

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