Overview

Product name: Human BMP4 ELISA Kit
Detection method: Colorimetric
Sample type: Cell culture supernatant, Serum, Plasma
Assay type: Sandwich (quantitative)
Sensitivity: < 15 pg/ml
Range: 8.23 pg/ml - 6000 pg/ml
Recovery: < 96%

Sample specific recovery:

<table>
<thead>
<tr>
<th>Sample type</th>
<th>Average %</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell culture supernatant</td>
<td>98.25</td>
<td>85% - 104%</td>
</tr>
<tr>
<td>Serum</td>
<td>92.95</td>
<td>80% - 101%</td>
</tr>
<tr>
<td>Plasma</td>
<td>94.32</td>
<td>82% - 102%</td>
</tr>
</tbody>
</table>

Assay duration: Multiple steps standard assay
Species reactivity: Reacts with: Human

Product overview:

Abcam’s BMP4 Human ELISA (Enzyme-Linked Immunosorbent Assay) kit is an in vitro enzyme-linked immunosorbent assay for the quantitative measurement of Human BMP4 in serum, plasma, and cell culture supernatants.

This assay employs an antibody specific for Human BMP4 coated on a 96-well plate. Standards and samples are pipetted into the wells and BMP4 present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Human BMP4 antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of BMP4 bound. The Stop Solution changes the color from

Abcam is committed to meeting high quality standards of ethical manufacturing and has decided to discontinue this product by June 2020 as it contains antibodies generated by
the ascites method. We are sorry for any inconvenience this may cause. We suggest ab231930 as a possible replacement.

Notes
Optimization may be required with urine samples.

Platform
Microplate

Properties

**Storage instructions**
Store at -20°C. Please refer to protocols.

<table>
<thead>
<tr>
<th>Components</th>
<th>1 x 96 tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>20X Wash Buffer Concentrate</td>
<td>1 x 25ml</td>
</tr>
<tr>
<td>5X Assay Diluent B</td>
<td>1 x 15ml</td>
</tr>
<tr>
<td>80X HRP-Streptavidin Concentrate</td>
<td>1 x 200µl</td>
</tr>
<tr>
<td>Assay Diluent A</td>
<td>1 x 30ml</td>
</tr>
<tr>
<td>Biotinylated anti-human BMP-4</td>
<td>2 vials</td>
</tr>
<tr>
<td>BMP4 Microplate (12 strips x 8 wells)</td>
<td>1 unit</td>
</tr>
<tr>
<td>BMP4 Standard Human (recombinant) (lyophilized)</td>
<td>2 vials</td>
</tr>
<tr>
<td>Stop Solution</td>
<td>1 x 8ml</td>
</tr>
<tr>
<td>TMB One-Step Substrate Reagent</td>
<td>1 x 12ml</td>
</tr>
</tbody>
</table>

**Relevance**
BMPs (bone morphogenetic proteins) belong to the TGF beta superfamily of structurally related signaling proteins. Members of this superfamily are widely represented throughout the animal kingdom and have been implicated in a variety of developmental processes. Proteins of the TGF beta superfamily are disulfide linked dimers composed of two 12-15 kDa polypeptide chains. As implied by their name, BMPs initiate, promote and regulate bone development, growth, remodeling and repair. Smad1 translocation to the nucleus is observed after the addition of BMP4 (also designated BMP2B), suggesting that BMP4 may play a role in activation of the Smad pathway. BMP is secreted into the extracellular matrix.

**Images**
Representative Standard Curve using ab99982.

Typical Standard Curve

Representative Standard Curve using ab99982.

Typical Standard Curve

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