# abcam

### **Product datasheet**

## Human Osteoprotegerin ELISA Kit ab100617

<u>15 References</u> 4 图像

概述

| 佩亚            |   |        |            |
|---------------|---|--------|------------|
| 产品名称          | 人Osteoprotegerin ELISA试剂 <b>盒</b>   |        |            |
| 检 <b>测方法</b>  | Colorimetric  |        |            |
| 样品类型          | Cell culture supernatant, Serum, Plasma, Cell Lysate  |        |            |
| 检测类型          | Sandwich (quantitative)   |        |            |
| 灵敏度           | < 1 pg/ml   |        |            |
| 范围            | 1.23 pg/ml - 900 pg/ml  |        |            |
| 回收率           | 100 %   |        |            |
|               |   |        | 特定样本回收率    |
|               | 样品类型  | 平均%    | 范围         |
|               | Cell culture supernatant  | 99.75  | 89% - 108% |
|               | Serum   | 99.85  | 89% - 108% |
|               | Plasma  | 102.45 | 90% - 109% |
| 实验 <b>步</b> 骤 | Multiple steps standard assay   |        |            |
| <b>种属反应性</b>  | 与反应: Human  |        |            |
| 产 <b>品概述</b>  | Abcam's Osteoprotegerin Human ELISA (Enzyme-Linked Immunosorbent Assay) kit is an <i>in vitro</i> |        |            |

enzyme-linked immunosorbent assay for the quantitative measurement of Human Osteoprotegerin in serum, plasma, and cell culture supernatants.

This assay employs an antibody specific for Human Osteoprotegerin coated on a 96-well plate. Standards and samples are pipetted into the wells and Osteoprotegerin present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Human Osteoprotegerin 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 Osteoprotegerin bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

Get results in 90 minutes with Human Osteoprotegerin ELISA Kit (ab189580) from our

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SimpleStep ELISA<sup>®</sup> range.

Produced using a non-baculovirus expression system.

Optimization may be required with urine samples.

We recommend preparing serum-free or low-serum medium samples, as serum tends to contain cytokines which may produce significant background signals. If it is necessary to test serum-containing medium, we recommend also running an uncultured media blank to assess baseline signals. This baseline can then be subtracted from the cultured media sample data.

Microplate

#### 性能

平台

说**明** 

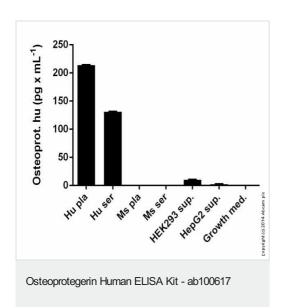
存放说明 Store at -20°C. Please refer to protocols.

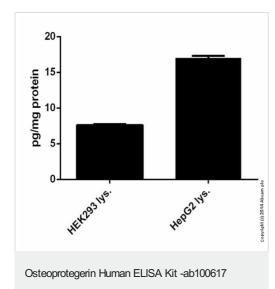
| 组件   | 1 x 96 tests |
|--|--------------|
| 20X Wash Buffer  | 1 x 25ml     |
| 5X Assay Diluent B                                       | 1 x 15ml     |
| 500X HRP-Streptavidin Concentrate                        | 1 x 200µl    |
| Assay Diluent A  | 1 x 30ml     |
| Biotinylated anti-Human Osteoprotegerin                  | 2 vials      |
| Osteoprotegerin Microplate (12 x 8 wells)                | 1 unit       |
| Recombinant Human Osteoprotegerin Standard (lyophilized) | 2 vials      |
| Stop Solution  | 1 x 8ml      |
| TMB One-Step Substrate Reagent                           | 1 x 12ml     |

| 功能            | Acts as decoy receptor for RANKL and thereby neutralizes its function in osteoclastogenesis.<br>Inhibits the activation of osteoclasts and promotes osteoclast apoptosis in vitro. Bone<br>homeostasis seems to depend on the local RANKL/OPG ratio. May also play a role in preventing<br>arterial calcification. May act as decoy receptor for TRAIL and protect against apoptosis. TRAIL<br>binding blocks the inhibition of osteoclastogenesis.   |
|---------------|---|
| 组织 <b>特异性</b> | Highly expressed in adult lung, heart, kidney, liver, spleen, thymus, prostate, ovary, small intestine, thyroid, lymph node, trachea, adrenal gland, testis, and bone marrow. Detected at very low levels in brain, placenta and skeletal muscle. Highly expressed in fetal kidney, liver and lung.   |
| 疾病相关          | Defects in TNFRSF11B are the cause of juvenile Paget disease (JPD) [MIM:239000]; also known as hyperostosis corticalis deformans juvenilis or hereditary hyperphosphatasia or chronic congenital idiopathic hyperphosphatasia. JPD is a rare autosomal recessive osteopathy that presents in infancy or early childhood. The disorder is characterized by rapidly remodeling woven bone, osteopenia, debilitating fractures, and deformities due to a markedly accelerated rate of bone remodeling throughout the skeleton. Approximately 40 cases of JPD have been reported worldwide. Unless it is treated with drugs that block osteoclast-mediated skeletal resorption, the disease can be fatal. |

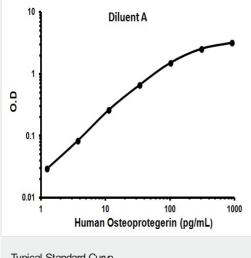
| 序列相似性                  | Contains 2 death domains.<br>Contains 4 TNFR-Cys repeats.                    |
|------------------------|--|
| <b>翻</b> 译 <b>后修</b> 饰 | N-glycosylated. Contains sialic acid residues.<br>The N-terminus is blocked. |
| 细 <b>胞定位</b>           | Secreted.  |

图片



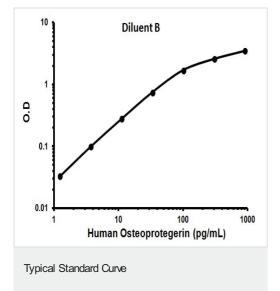


Osteoprotegerin measured in cell lysates showing quantity (pg) per mg of tested sample



#### Representative Standard Curve using ab100617.

Typical Standard Curve



Representative Standard Curve using ab100617.

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