

# Active Osteopontin (OPN) Instruction Manual

**SBPA204Ra61**

**Rattus norvegicus (Rat)**

**Buffer Formulation**

20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA,  
1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

**Traits**

Freeze-dried powder

**Purity**

> 95%

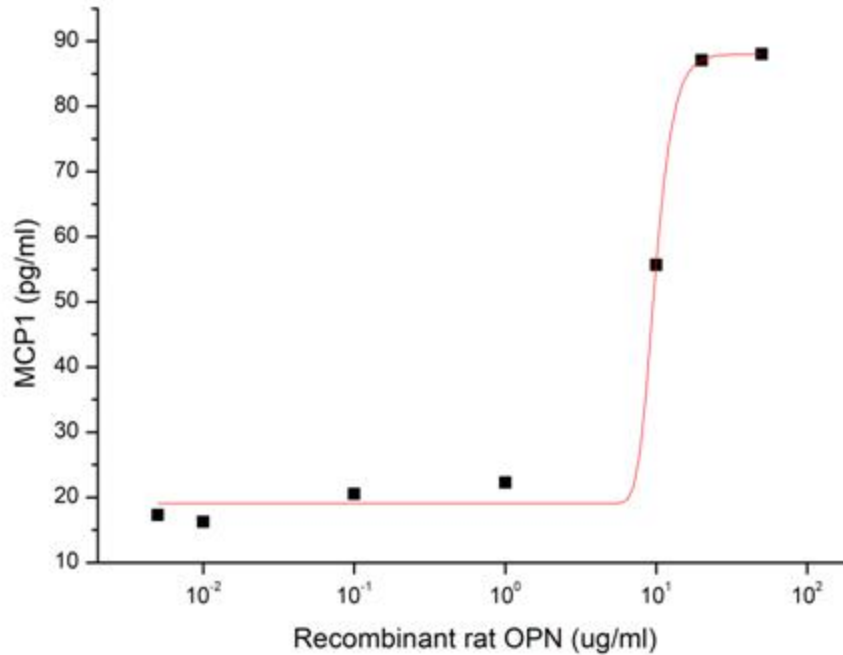
**Isoelectric Point**

4.3

**Applications**

Cell culture; Activity Assays.

**ACTIVITY TEST**



**Figure1. MCP-1 levels in the cell supernatant of MCF-7 cells induced by OPN**

Osteopontin (OPN), a multifunctional phosphorylated glycoprotein, plays an important role in neutrophil recruitment and was found to induce the expression of proinflammatory chemokines including MCP-1 and MIP-1 $\beta$  which promote migration and recruitment of inflammatory cells. It has been reported that OPN induces MCP-1 expression through the NF-kappaB pathways in MCF-7 breast cancer cell line. To test the bioactivity of recombinant rat OPN, MCF-7 cells were seeded into 24-well plate at a density of  $1 \times 10^5$  cells/mL, and allowed to attach overnight before treated with certain concentrations of recombinant rat OPN for 48h and MCP-1 levels in the cell supernatant were determined by ELISA (SEA087Hu). MCP-1 levels in the cell supernatant of MCF-7 cells increased significantly after stimulated with OPN which was shown in Figure1, the EC50 was 9.83 ug/ml.

## USAGE

Reconstitute in 20mM Tris, 150mM NaCl (PH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

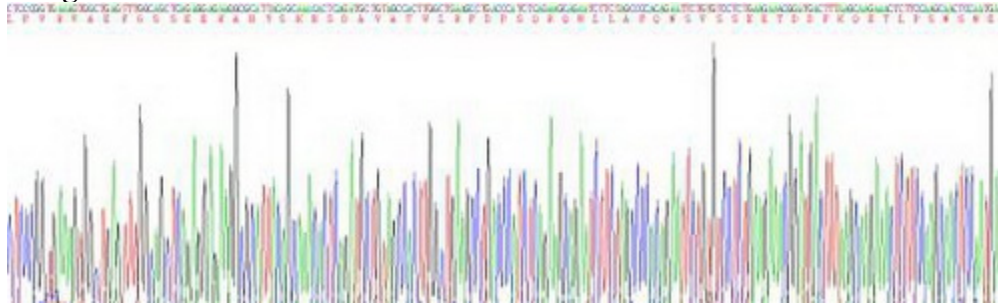
## STORAGE

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

## STABILITY

The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

## Image



SDS-PAGE Image

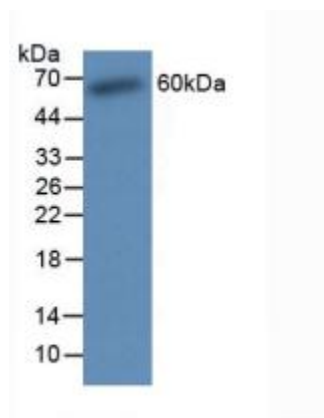


Figure. Western Blot; Sample: Recombinant OPN, Rat.

## [IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.