

Code No. 18621

**Anti-Mouse  
Osteopontin (O-17) Rabbit IgG Affinity Purify**

Volume : 100 µg

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**Introduction** : Osteopontin (OPN) is a secreted glycoprotein that was originally isolated from bone. Its molecular weights have been reported in the range of 66 kDa to 44 kDa depending on glycosylation and phosphorylation. OPN is also known to be expressed in other fluids and tissues including milk, urine, activated T cells, smooth muscle cells, kidney and some tumor cells. OPN contains an Arg-Gly-Asp (RGD) amino acid sequence. This motif is present in fibronectin, vitronectin and a variety of other extra-cellular proteins that bind members of the integrin family of cell surface receptors such as  $\alpha v \beta 3$ . OPN was also identified as a ligand for CD44, which levels correlate with aggressiveness of lymphoid tumors and invasiveness of bladder carcinoma. Its interaction does not require RGD motif of OPN. In OPN knockout mice, it has been reported that a significantly decreased level of debridement was shown. Although the distribution and expression pattern of OPN in the human body have suggested the multiple function of OPN, its function under different situations remain obscure.

**Antigen** : Synthetic peptide of the N-terminal part of Mouse Osteopontin (LPVKVTDSGSSEEKLY)

**Purification** : Purified with antigen peptide

**Form** : Lyophilized product from 1 % BSA in PBS containing 0.05%  $\text{NaN}_3$

**How to use** : 1.0 mL deionized water will be added to the product (the conc. comes up 100 µg /mL)

**Stability** : Lyophilized product, 5 years at 2 – 8 °C  
: Solution, 2 years at –20 °C

**Application** : This antibody can be used for immunohistochemistry with formalin fixed paraffin embedded tissues after microwave treatment (10 min, 10 mM citrate buffer, pH 6.0) by several techniques such as Avidin Biotin Complex (ABC) Method. The optimal concentration is 1 - 2 µg/mL, however, the concentration should be optimized by each laboratory.  
: This antibody can be used for western blotting in concentration of 2 - 5 µg /mL.

**Specificity** : Reacts to both recombinant and native form mouse Osteopontin.  
Cross-reacts with Rat Osteopontin but not cross- react with Human Osteopontin.

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