

Basic Information

Product Name	Anti-Osteopontin/SPP1 Antibody
Gene Name	SPP1
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, ELISA
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Osteopontin different from the related mouse sequence by eight amino acids, and from the related rat sequence by seven amino acids.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	66 kDa(OPNprecursor), 40 kDa(OPNcleaved)
Dilution Ratios	Western blot (WB): 1:500-2000 Enzyme linked immunosorbent assay (ELISA): 1:100-1000

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

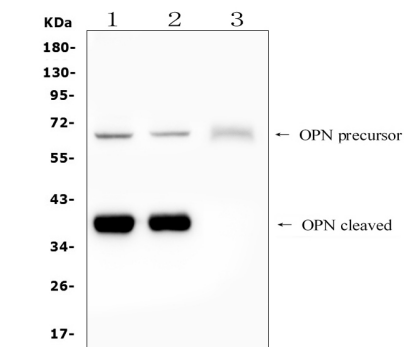
Background Information

Osteopontin (OPN), also known as secreted phosphoprotein 1 (SPP1), is a protein that in humans is encoded by the SPP1 gene (secreted phosphoprotein 1). The protein encoded by this gene is involved in the attachment of osteoclasts to the mineralized bone matrix. And the encoded protein is secreted and binds hydroxyapatite with high affinity. The osteoclast vitronectin receptor is found in the cell membrane and may be involved in the binding to this protein. Also, this protein is a cytokine that upregulates expression of interferon-gamma and interleukin-12. Several transcript variants encoding different isoforms have been found for this gene.

Reference

Anti-Osteopontin/SPP1 Antibody被引用在35文献中。

Selected Validation Data



Molecular Weight of OPN precursor: 66 kDa.
Molecular Weight of OPN cleaved : 25-55 kDa.

Western blot analysis of Osteopontin/SPP1 using anti-Osteopontin/SPP1 antibody (PB0589). The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: mouse brain tissue lysates, Lane 3: human SHG-44 whole cell lysates. After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Osteopontin/SPP1 antigen affinity purified polyclonal antibody (PB0589) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Osteopontin/SPP1 at approximately 66 kDa(OPNprecursor),40 kDa(OPNcleaved). The expected band size for Osteopontin/SPP1 is at 35 kDa.