

## Product datasheet for **TA388947**

### SPP1 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, WB
Recommended Dilution:	Sandwich ELISA: To detect Human Osteopontin by sandwich ELISA (using 100ul/well antibody solution), a concentration of 0.5 – 2.0 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with ProSci's Biotinylated Anti-Human Osteopontin as a detection antibody, allows the detection of at least 0.2 – 0.4 ng/well of recombinant Human Osteopontin. Western Blot To detect Human Osteopontin by Western Blot analysis this antibody can be used at a concentration of 0.1 – 0.2 µg/ml. When used in conjunction with compatible secondary reagents, the detection limit for Recombinant Human Osteopontin is 1.5 – 3.0 ng/lane, under either reducing or non-reducing conditions.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Produced from sera of rabbits immunized with highly pure recombinant Human Osteopontin. Anti-Human Osteopontin-specific antibody was purified by affinity chromatography employing an immobilized Human Osteopontin matrix.
Concentration:	lot specific
Purification:	Osteopontin-specific antibody was purified by affinity chromatography employing an immobilized Human Osteopontin matrix
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Database Link:	<a href="#">P10451</a>



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**Background:**

Osteopontin is a secreted glycoprotein that functions as a ligand to  $\alpha$ v $\beta$ 3 integrin and possibly other receptors. It binds tightly to hydroxyapatite and can act as a structural component of the extracellular mineralized matrix. Osteopontin is initially secreted as a 298 amino acid protein, which is subject to multiple post-translational modifications including glycosylation, phosphorylation, and specific proteolytic cleavages into various smaller molecular weight fragments. Osteopontin is expressed in a wide range of cells and tissues including osteoblasts, various tumor cell lines, extrasosseous cells in the inner ear, brain, kidney, deciduum, placenta and odontoblasts. In addition to its involvement in mineralized matrix formation, Osteopontin can also function as a cytokine that stimulates the release of IFN $\gamma$  and IL-12, while inhibiting the production of IL-10. Recombinant Human Osteopontin is a 298 amino acid protein, which, due to glycosylation, migrates at an apparent molecular weight of 60.0-65.0 kDa by SDS-PAGE analysis under reducing conditions.