

Osteopontin



Polyclonal Antibody



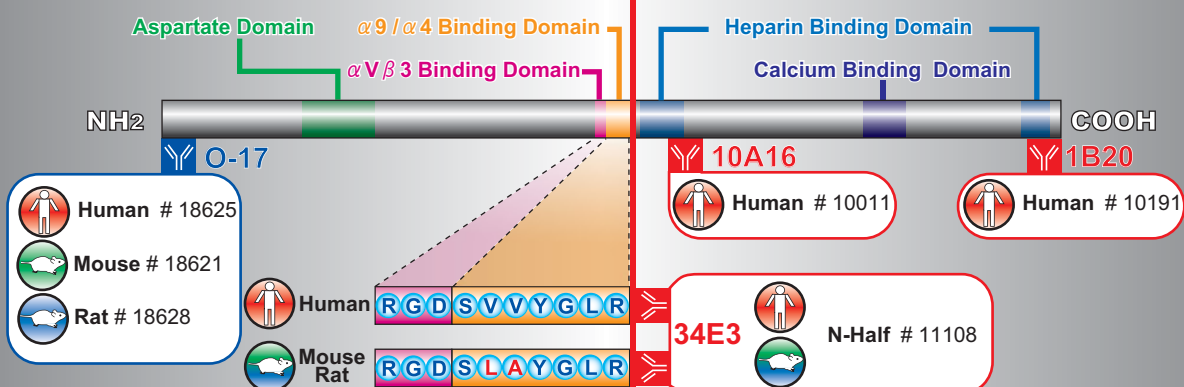
Monoclonal Antibody



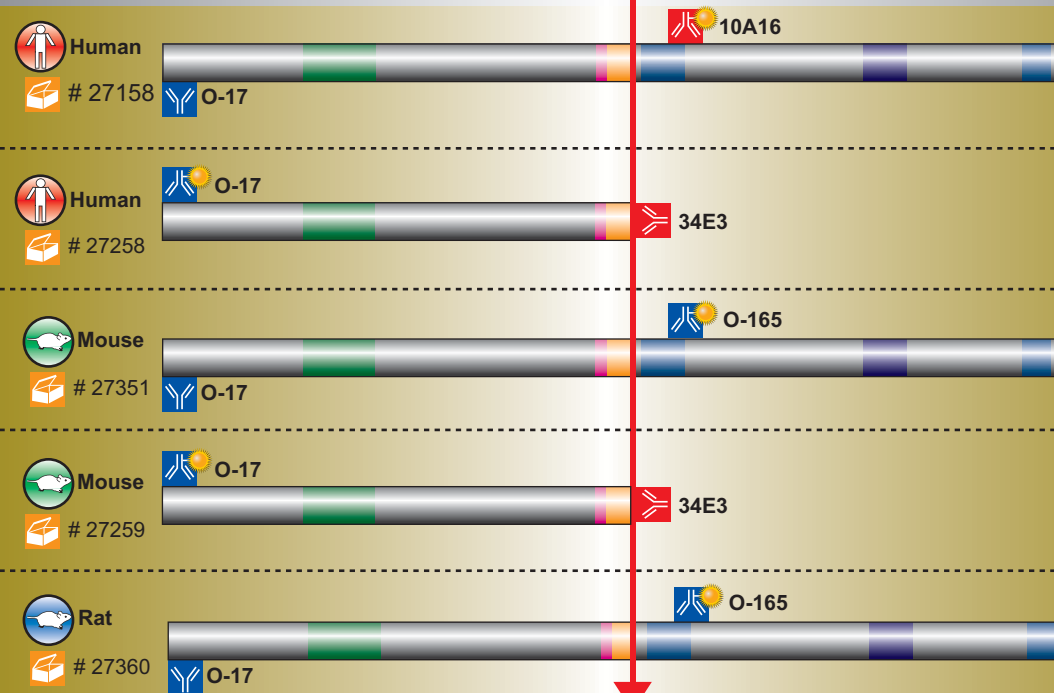
Assay Kit

Antibodies

Thrombin Cleavage



ELISA Kits



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 $\alpha v \beta 3$, $\alpha 5 \beta 1$, $\alpha 8 \beta 1$ and $\alpha v \beta 5$, and further, it is reported that the motif is involved in cell adherence, migration, growth, cancer metastasis, angiogenesis and bone resorption. It is reported that the motif which is present at N-terminal-side from thrombin-clavage site of OPN (Human: SVVYGLR) binds to $\alpha 4$ and $\alpha 9$ integrin family, and that the motif is involved in neutrophil erosion of inflammatory cell and neutrophilic migration. Recently OPN is proving to be involved in rheumatoid arthritis. It is reported that the N-terminal fragment of thrombin-clavage OPN (OPN N-half) has increased percentage of all OPN in rheumatoid patients. And further, OPN was 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 debriement 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.

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Osteopontin

Osteopontin Antibodies

Code No.	Name				Volum	IHC F/P	W/B	Remarks
10011	Anti-Human	Osteopontin	(10A16)	Mouse IgG MoAb	200 µg	○ (※ MW) 0.5 µg/mL	○ 0.5 ~ 1 µg/mL	Human Osteopontin specific. Non-cross react to mouse and rat Osteopontin.
10191	Anti-Human	Osteopontin	(1B20)	Mouse IgG MoAb	100 µg	○ (※ MW) 1 ~ 2 µg/mL	○ 2 µg/mL	The antibody, interestingly, can stain with rat osteopontin. Can react with human osteopontin, but unknown staining is observed in erythrocytes. (This reaction cannot be seen in rat.) Cross react to rabbit plasma osteopontin.
11108	Anti-	Osteopontin N-Half	(34E3)	Mouse IgG MoAb	100 µg	Not Tested	○ 5 µg/mL	Specific to C-terminal of OPN N-Half (N-terminal Osteopontin fragment cleaved by thrombin). React to Human, Mouse, Rat OPN N-Half.
18625	Anti-Human	Osteopontin	(O-17)	Rabbit IgG Affinity purify	100 µg	○ (※ MW) 1 ~ 2 µg/mL	○ 2 ~ 5 µg/mL	Cross react to both recombinant and native human Osteopontin. Can react with thrombin digested form of human Osteopontin. Non-Cross react to mouse Osteopontin
18621	Anti-Mouse	Osteopontin	(O-17)	Rabbit IgG Affinity purify	100 µg	○ (※ MW) 1 ~ 2 µg/mL	○ 2 ~ 5 µg/mL	Cross react to both recombinant and native mouse Osteopontin. Cross react to Rat Osteopontin and non-cross react to Human Osteopontin.
18628	Anti-Rat	Osteopontin	(O-17)	Rabbit IgG Affinity purify	100 µg	○ (※ MW) 1 ~ 2 µg/mL	○ 2 µg/mL	Cross react to both recombinant and native rat Osteopontin. Can react with Rat Osteopontin thrombin digested form. Non-cross react to Human and mouse Osteopontin

※ IHC: Immunohistochemistry, *F/P: Formalin fixed paraffin embedded tissue, *W/B: Western Blotting, *MW: Microwave pre-treatment is necessary

Osteopontin ELISA Kits

Code No.	Name			Volum-e	Assay Range	Reaction Time	Application
27158	Human	Osteopontin	Assay Kit - IBL	96 well	5 ~ 320 ng/mL	1st Reaction, 37°C, 1Hr 2nd Reaction, 4°C, 30min	Urine, EDTA-Plasma, Supernatant of cell lines. (Can assay both native and recombinant forms)
27258	Human	Osteopontin N-Half	Assay Kit - IBL	96 well	6.25 ~ 400 pmol/L	1st Reaction, 37°C, 1Hr 2nd Reaction, 4°C, 30min	Urine, EDTA-Plasma, Synovial fluid, Supernatant of cell lines. (Can assay both native and recombinant forms)
27351	Mouse	Osteopontin	Assay Kit - IBL	96 well	1 ~ 64 ng/mL	1st Reaction, 37°C, 1Hr 2nd Reaction, 4°C, 30min	Urine, EDTA-Plasma, Supernatant of cell lines. (Can assay both native and recombinant forms)
27259	Mouse	Osteopontin N-Half	Assay Kit - IBL	96 well	25 ~ 1,600 pmol/L	1st Reaction, 37°C, 1Hr 2nd Reaction, 4°C, 30min	Urine, EDTA-Plasma, Supernatant of cell lines. (Can assay both native and recombinant forms)
27360	Rat	Osteopontin	Assay Kit - IBL	96 well	0.07 ~ 4.75 ng/mL	1st Reaction, 37°C, 1Hr 2nd Reaction, 4°C, 30min	Urine, EDTA-Plasma, Supernatant of cell lines. (Can assay both native and recombinant forms)

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