10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Osteopontin (N-terminal region) Antibody

Catalog # AN1873

Product Information

Application	WB, ICC
Primary Accession	P10451
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG1
Clone Names	M574
Calculated MW	35423

Additional Information

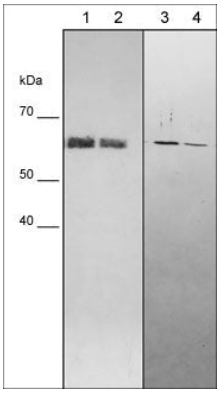
Gene ID	6696
Other Names	Bone sialoprotein 1, Nephropontin, Secreted phosphoprotein 1, SSP-1, Urinary stone protein, Uropontin, BNSP, OPN, SSP1, osteopontin
Dilution	WB~~1:1000 ICC~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-Osteopontin (N-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

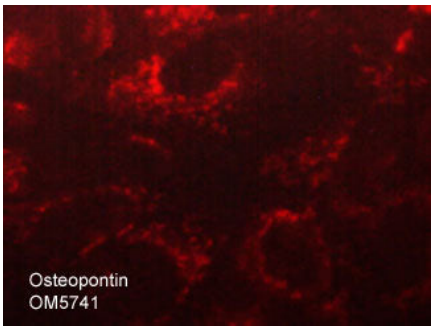
Osteopontin (OPN) is a 34 kDa sialic acid rich member of small integrin-binding ligand N-linked glycoproteins. It is expressed in many different tissues and is post-translationally modified at multiple sites with both glycosylation and phosphorylation. The mature post-translationally modified protein is 60 kDa. OPN is involved with cell survival, proliferation, invasion, and stem like behavior. OPN can interact with CD44, bind hydroxyapatite, and activates many integrins. These interactions are important for OPN function in cell matrix formation. A higher presence of OPN has been found in a variety of cancers, leading to increased tumor growth and metastasis. In addition, OPN is involved in type I immunity through its function as a cytokine where it can enhance production of interferon-gamma and interleukin-12 and reduce production of interleukin-10.

Images

Western blot analysis of human recombinant osteopontin protein (lane 1 & 2) or human MDA-MB-231 cells (lane 3 & 4). The blots were probed with mouse monoclonal anti-Osteopontin (AN1873) at a dilution of 1:1000 (lane 1),



1:4000 (lane 2), 1:250 (lane 3), and 1:1000 (lane 4).



Immunocytochemical labeling of Osteopontin in paraformaldehyde fixed and NP-40 permeabilized MCF-7 cells. The cells were labeled with mouse monoclonal anti-Osteopontin (M574). The antibody was detected using goat anti-mouse DyLight® 594.