

**Rabbit Anti-Osteopontin [EPR21139-316]: RM0150, RM0150RTU7**

**Intended Use:** For Research Use Only

**Description:** Osteopontin, also known as Phosphoprotein 1 (SPP1), is an acidic, calcium-binding glycol-phosphoprotein of 44 to 66 kDa, depending on species and cell type. Osteopontin interacts with integrins and CD44. It has been shown to be multifunctional in cell migration, cell survival, inhibition of calcification, regulation of immune cell function, development and regeneration of skeletal muscle, and control of tumor cell phenotype. Osteopontin is found in all body fluids and secreted by osteoclasts, macrophages, cardiac fibroblasts, and activated T cells. Immunohistochemical analysis shows that Osteopontin is widely expressed in many types of cells including epithelial cells of the gastrointestinal tract, gall bladder, pancreas, urinary and reproductive tracts, lung, breast, salivary glands, and sweat glands. Osteopontin is overexpressed in a variety of human malignancies, including breast, lung, ovarian, gastric, hepatocellular, and prostate carcinomas, mesothelioma, and melanoma. It was proposed to be a potential prognostic marker in ovary cancer, prostate cancer, mesothelioma, and melanoma. In addition, Osteopontin is considered to be a potential marker for atypical teratoid/rhabdoid tumor, a highly malignant central nervous system tumor, commonly seen in infancy and childhood.

**Specifications**

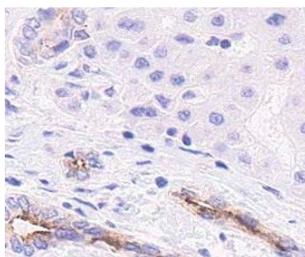
Clone:	EPR21139-316
Source:	Rabbit
Isotype:	IgG
Reactivity:	Human
Immunogen:	Recombinant fragment within Human Osteopontin aa 1-300
Localization:	Cytoplasm
Formulation:	Purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN <sub>3</sub> )
Storage:	Store at 2°- 8°C
Applications:	IHC
Package:	

Description	Catalog No.	Size
Osteopontin Concentrated	RM0150	1 ml
Osteopontin Prediluted	RM0150RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue:	Osteosarcoma, breast cancer
Concentrated Dilution:	50-200
Pretreatment:	Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human liver stained with anti-Osteopontin using DAB

**References:**

1. Evaluation of the osteopontin in oral peripheral and central giant cell granuloma. Aksakalli N, et al. Indian J Pathol Microbiol. 2018.
2. Cancer-associated Fibroblast-derived IL-6 Promotes Head and Neck Cancer Progression via the Osteopontin-NF-kappa B Signaling Pathway. Qin X et al. Theranostics. 2018.
3. Osteopontin Augments M2 Microglia Response and Separates M1- and M2-Polarized Microglial Activation in Permanent Focal Cerebral Ischemia. Ladwig A et al. Mediators Inflamm. 2017.