

**Rabbit Anti-Osteonectin [MD18R]: RM0321, RM0321RTU7**

**Intended Use:** For Research Use Only

**Description:** Bone matrix consists of collagen and non-collagenous proteins. Osteonectin, a 32-kD calcium-binding glycoprotein, is found in a variety of cell types, which include osteoblastic epithelial cells and fibroblasts. In bone tissue, this glycoprotein is present in active osteoblasts and young osteocytes, and it is involved in the early steps of mineralization of skeletal tissue. Osteonectin is a recognized differentiation marker of normal osteogenic cells. The latter represents about 10% of the total protein content of bone. Osteonectin is one of the non-collagenous components and is bone-specific due to its biochemical properties. Osteonectin is a useful biochemical marker for bone-related tumors. Thus, osteonectin antibody can be used to demonstrate the presence of osteonectin in active osteoblasts and osteoprogenitor cells as well as in young osteocytes.

**Specifications**

Clone: MD18R  
 Source: Rabbit  
 Isotype: IgG  
 Reactivity: Human  
 Localization: Cytoplasm  
 Formulation: 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
Osteonectin Concentrated	RM0321	1 ml
Osteonectin Prediluted	RM0321RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue: Osteosarcoma, breast cancer  
 Concentrated Dilution: 100-200  
 Pretreatment: Citrate pH6.0, 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 lung carcinoma stained with anti-osteonectin using DAB

**References:**

1. Immunohistochemical Expression of TGF-β1 and Osteonectin in engineered and Ca(OH)<sub>2</sub>-repaired human pulp tissues. Chisini LA, et al. Braz Oral Res. Oct 10;30(1):e93, 2016.
2. High SPARC Expression Starting from Dysplasia, Associated with Breast Carcinoma, Is Predictive for Bone Metastasis without Enhancement of Plasma Levels. Maroni P, et al. Int J Mol Sci. Nov 26;16(12):28108-22, 2015.
3. Efficacy of nab-paclitaxel does not seem to be associated with SPARC expression in metastatic breast cancer. Schneeweiss A, et al. Anticancer Res. Nov;34(11):6609-15, 2014.
4. SPARC expression is negatively correlated with clinicopathological factors of gastric cancer and inhibits malignancy of gastric cancer cells. Zhang J, et al. Oncol Rep. May;31(5):2312-20, 2014.