

Application: Immunohistochemical detection of human osteocalcin using monoclonal anti-bovine osteocalcin antibodies

Monoclonal Anti-Bovine Osteocalcin (Cat.# M041)

All four of the Takara Bio Monoclonal Anti-Bovine Osteocalcin antibody clones recognize bovine and human osteocalcins with equivalent affinities. The four monoclonal anti-bovine osteocalcin (Cat.# M041-M044) antibody clones were used to detect human osteocalcin in different human paraffin-embedded tissue samples.

Methods:

Samples: Human Disease Hybrid-Ready Tissues (Novagen); paraffin-embedded tissues

Detection: ENVISION Plus (DAKO)

Staining protocol:

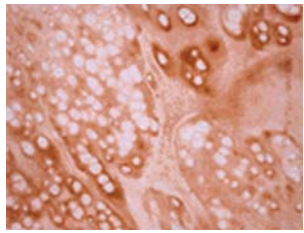
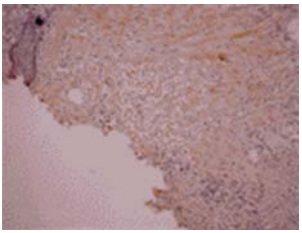
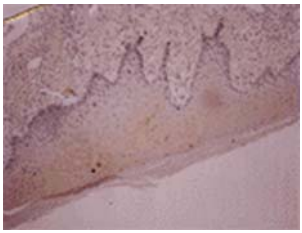
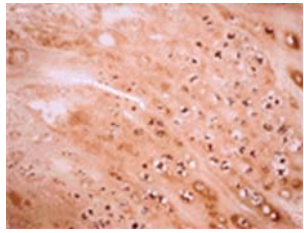
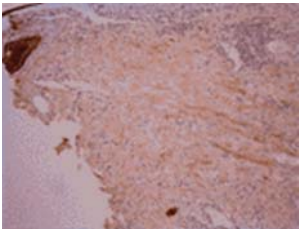
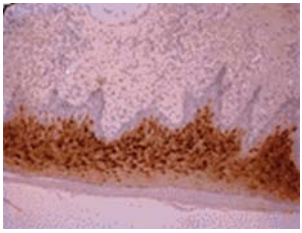

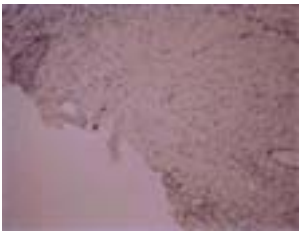
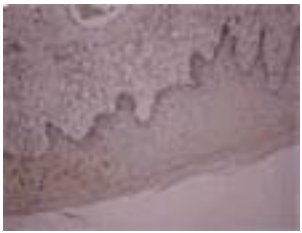

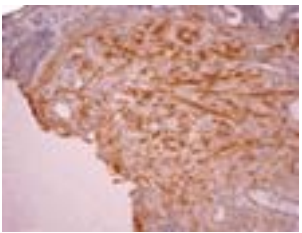


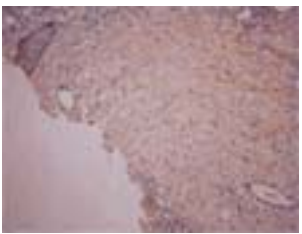

1. Deparaffinization of tissues.
2. Expose antigens by treating the tissues with proteinase K (0.4 mg/ml) for 5 min. at room temperature.
3. Block endogenous peroxidase by treating tissues with a 3% hydrogen peroxide solution for 5 min.
4. Inhibit non-specific binding by applying a blocking solution for 20 min.
5. React tissues with the primary antibody by incubating tissues with a Monoclonal Anti-Bovine Osteocalcin (10 µg/ml) for 60 min at room temperature.
6. React with the secondary antibody using the ENVISION Plus reagents.
7. Colorimetric detection of peroxidase by incubating with the DAB substrate.
8. Counterstain the samples with hematoxylin.
9. Dehydration, fixation, and mounting.

Results continued on next page...

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Results:

mAb Clone	Chondroma	Synovial Sarcoma (area A)	Synovial Sarcoma (area B)
OC4-30			
OCG2			
OCG3			
OCG4			
OC4-5			

Chondroma: Hybrid-Ready Tissues/Human Disease Tissues/Bone Tumor
(Novagen Cat. No. 70305-3)

Synovial Sarcoma: Hybrid-Ready Tissues/Human Disease Tissues/Osteosarcoma
(Novagen Cat. No. 70386-3)