

Osteocalcin Monoclonal Antibody (OC4-30)

Product Details	
Size	100 µg
Species Reactivity	Bovine, Dog, Chicken, Goat, Human, Sheep, Pig, Rabbit, Rat
Published Species	Dog, Rat
Host/Isotype	Mouse / IgG2a
Class	Monoclonal
Type	Antibody
Clone	OC4-30
Conjugate	Unconjugated
Immunogen	Full-length Bovine osteocalcin
Form	Lyophilized
Concentration	2.0 mg/mL
Purification	Ion-exchange chromatography
Storage buffer	10mM PBS, pH 7.4, with 1% BSA
Contains	no preservative
Storage conditions	4° C
RRID	AB_2533125

Applications	Tested Dilution	Publications
Western Blot (WB)	Assay-dependent	1 Publication
Immunohistochemistry (IHC)	-	3 Publications
Immunohistochemistry (Paraffin) (IHC (P))	10 µg/mL	-
Immunohistochemistry (Frozen) (IHC (F))	10 µg/mL	-
Immunocytochemistry (ICC/IF)	-	1 Publication

Product Specific Information

Monoclonal antibody was obtained by fusing the mouse myeloma cell-line P3U1 with spleen cells of BALB/c mouse after immunization with bovine osteocalcin.

Specificity and Subclass: Epitope gamma-carboxylated residue at position 17 (does not react with decarboxylated osteocalcin.)

Reconstitution: Dissolve the lyophilized antibody in 50 µL of distilled water (final concentration: 2.0 mg/mL). This solution can be used as a stock solution. If dilution is necessary for your application, dilute the stock solution with the following Dilution solution just prior to use. When the entire amount of antibody is to be used over a short time period, it may be dissolved directly in 500 µL or more of the Dilution solution. Be sure to store the antibody at a minimum concentration of 2.0 mg/mL. A lower antibody concentration may result in decreased stability. Reconstituted antibody solution should contain 0.1% sodium azide as a preservative when stored at 4°C.

Storage: 4°C This product does not contain preservative. The stock solution (2.0 mg/mL) should be stored in aliquots at -20°C for 1 year, or should be stored at 4°C for 6 months after adding 0.1% sodium azide. Avoid repeated freeze-thaw cycles.

5 References

Western Blot (1)

International journal of molecular medicine

Bidirectional ephrinB2EphB4 signaling regulates the osteogenic differentiation of canine periodontal ligament stem cells.

"Published figure using Osteocalcin monoclonal antibody (Product # 33-5400) in Western Blot"

Authors: Zhu S,Liu Z,Yuan C,Lin Y,Yang Y,Wang H,Zhang C,Wang P,Gu M

Species
Not Applicable

Dilution
Not Cited

Year
2020

Immunohistochemistry (3)

Biotechnic & histochemistry : official publication of the Biological Stain Commission

The effect of autologous bone marrow stromal cells differentiated on scaffolds for canine tibial bone reconstruction.

"33-5400 was used in immunohistochemistry to assess the use of cultured autologous bone marrow stromal cells on different scaffolds for healing defects in the tibiae of dogs."

Authors: Özdal-Kurt F,Tulu I,Vatansever HS,Tong S,Delilolu-Gürhan SI

Species
Dog

Dilution
Not Cited

Year
2016

Biotechnic & histochemistry : official publication of the Biological Stain Commission

The effect of different implant biomaterials on the behavior of canine bone marrow stromal cells during their differentiation into osteoblasts.

"33-5400 was used in immunohistochemistry to elucidate the behavior of canine bone marrow stromal cells during differentiation into osteoblasts utilizing different implant biomaterials"

Authors: Özdal-Kurt F,Tulu I,Vatansever HS,Tong S,en BH,Delilolu-Gürhan SI

Species
Not Applicable

Dilution
Not Cited

Year
2016

[View more IHC references on thermofisher.com](#)

Immunocytochemistry (1)

Archives of oral biology

Attachment and growth of dental pulp stem cells on dentin in presence of extra calcium.

"33-5400 was used in immunocytochemistry to characterize the growth and attachment of dental pulp stem cells on dentin with extra calcium"

Authors: Özdal-Kurt F,en BH,Tulu I,Vatansever S,Türk BT,Delilolu-Gürhan I

Species
Not Applicable

Dilution
Not Cited

Year
2016

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