

## Datasheet: 0400-0041

<b>Description:</b>	MOUSE ANTI HUMAN OSTEOCALCIN
<b>Specificity:</b>	OSTEOCALCIN
<b>Other names:</b>	BONE GLA PROTEIN
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	2H9F11F8
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	0.2 mg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
ELISA	■			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using the appropriate negative/positive controls.

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	Reacts with: Rabbit, Pig, Rat, Bovine Does not react with: Mouse <b>N.B.</b> Antibody reactivity and working conditions may vary between species.
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	1.0 mg/ml
<b>Immunogen</b>	Recombinant human osteocalcin GST fusion protein.

**External Database  
Links**

**UniProt:**

[P02818](#)   [Related reagents](#)

**Entrez Gene:**

[632](#)   BGLAP   [Related reagents](#)

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**Specificity**

**Mouse anti Human Osteocalcin antibody, clone 2H9F11F8** recognizes intact human and bovine osteocalcin in a "2 site" assay and reacts with osteocalcin fragments corresponding to amino acids 15-31 and 20-43 of the native molecule. It does not recognize fragments representing amino acids 1-19 or 7-19.

Osteocalcin (Bone Gla Protein) is a 49 amino acid single chain vitamin K dependent protein (MW 5.8 kDa), made by osteoblasts that is a major component of the non-collagenous bone matrix. Serum osteocalcin is elevated in diseases characterized by increased bone turnover such as osteoporosis, hyperparathyroidism and Paget's disease, and low in conditions associated with low bone turnover such as hypoparathyroidism and growth hormone deficiency.

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**References**

1. Rehder, D.S. *et al.* (2015) Gamma-carboxylation and fragmentation of osteocalcin in human serum defined by mass spectrometry. [Mol Cell Proteomics. 14 \(6\): 1546-55.](#)
2. Käkönen, S-M. *et al.* (2005) Method for prediction of bone fractures by osteocalcin measurements [US Patent: US6967081B1](#)

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**Storage**

Store at +4°C or at -20°C if preferred.  
Storage in frost-free freezers is not recommended.  
This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Shelf Life**

18 months from date of despatch.

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**Health And Safety  
Information**

Material Safety Datasheet documentation #10040 available at:  
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@549</a> , <a href="#">DyLight@649</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR8...)	<a href="#">DyLight@800</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Human Anti Mouse IgG2a (HCA037...)	<a href="#">FITC</a> , <a href="#">HRP</a>

Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

## Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

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