

Datasheet: MCA5225Z

**BATCH NUMBER 160484**

<b>Description:</b>	MOUSE ANTI HUMAN OSTEOCALCIN:Preservative Free
<b>Specificity:</b>	OSTEOCALCIN
<b>Other names:</b>	Bone Gla Protein
<b>Format:</b>	Preservative Free
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	2D4
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 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
Immunofluorescence	▪			0.1 - 10 ug/ml

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 appropriate negative/positive controls.

<b>Target Species</b>	Human
<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>	None present
<b>Approx. Protein Concentrations</b>	Ig concentration 0.5 mg/ml
<b>Immunogen</b>	Recombinant protein corresponding to aa 52-100 of human osteocalcin.

**External Database  
Links**

**UniProt:**

[P02818](#)    [Related reagents](#)

**Entrez Gene:**

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

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**RRID**                      AB\_2065035

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**Fusion Partners**            Spleen cells from BALB/c mice were fused with cells from the Sp2/0 myeloma cell line.

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**Specificity**                      **Mouse anti Human osteocalcin antibody, clone 2D4** recognizes human osteocalcin, also known as bone gla protein or Gamma-carboxyglutamic acid-containing protein. Osteocalcin is a 49 amino acid ~5 kDa calcium-binding bone protein comprising ~1-2% total bone protein mass. Osteocalcin also has an additional 28 amino acid propeptide region along with a 23 amino acid signal peptide region.

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**References**                      1. Kover, K. *et al.* (2011) Bone marrow cavity: a supportive environment for islet engraftment. [Islets. 3: 93-101.](#)  
2. Oliveira, M.B. *et al.* (2016) Autonomous osteogenic differentiation of hASCs encapsulated in methacrylated gellan-gum hydrogels. [Acta Biomater. 41: 119-32.](#)  
3. Mizoshiri, N. *et al.* (2015) Transduction of Oct6 or Oct9 gene concomitant with Myc family gene induced osteoblast-like phenotypic conversion in normal human fibroblasts. [Biochem Biophys Res Commun. 467 \(4\): 1110-6.](#)

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**Storage**                              Store at -20°C only.  
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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**Guarantee**                              12 months from date of despatch

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**Health And Safety  
Information**                      Material Safety Datasheet documentation #10162 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA5225Z>  
10162

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**Regulatory**                              For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)            [RPE](#)

Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)

Goat Anti Mouse IgG (STAR76...)            [RPE](#)

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

Goat Anti Mouse IgG (STAR70...)            [FITC](#)

Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

Goat Anti Mouse IgG (STAR77...) [HRP](#)

Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

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