

Datasheet: MCA5225Z

BATCH NUMBER 148496

Description:	MOUSE ANTI HUMAN OSTEOCALCIN:Preservative Free
Specificity:	OSTEOCALCIN
Other names:	Bone Gla Protein
Format:	Preservative Free
Product Type:	Monoclonal Antibody
Clone:	2D4
Isotype:	IgG1
Quantity:	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.

	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.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present
Approx. Protein Concentrations	Ig concentration 0.5 mg/ml
Immunogen	Recombinant protein corresponding to aa 52-100 of human osteocalcin.

**External Database
Links**

UniProt:

[P02818](#) [Related reagents](#)

Entrez Gene:

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

RRID

AB_2065035

Fusion Partners

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

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.

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.](#)

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.

Guarantee

12 months from date of despatch

**Health And Safety
Information**

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

Regulatory

For research purposes only

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

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