

Datasheet: MCA6263B

BATCH NUMBER 100005185

Description:	MOUSE ANTI HUMAN OSTEOPONTIN:Biotin
Specificity:	OSTEOPONTIN
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	F03-4E8
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
ELISA	▪			1.0 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 conjugated to Biotin - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide (NaN ₃)
Stabilisers	1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	HEK293 derived recombinant human full length osteopontin (Ile17-Asn314)

**External Database
Links**

UniProt:

[P10451](#) [Related reagents](#)

Entrez Gene:

[6696](#) SPP1 [Related reagents](#)

Synonyms

BNSP, OPN

Fusion Partners

Cell fusion between immunized BALB/c mouse spleen cells and mouse myeloma SP2/0

Specificity

Mouse anti Human osteopontin antibody, clone F03-4E8, recognizes osteopontin (OPN) also known as bone sialoprotein 1, nephropontin secreted phosphoprotein 1 and uropontin. It is an acidic glycoprotein and is a member of the intrinsically disordered class of proteins ([Kurzbauch *et al.* 2013](#)). OPN plays a role in a multitude of physiological and pathophysiological processes. In inflammation it induces cell adhesion and migration, regulates differentiation of proinflammatory lymphocytes and inhibits apoptosis of inflammatory cells ([Clemente *et al.* 2016](#)). OPN is expressed by various cell types including bone, neural, epithelial and endothelial cells. It is also expressed by the immune cells T cells, B cells, natural killer cells and macrophages. In its secreted form OPN can be found in biological fluids such as blood, urine, bile and milk ([Castello *et al.* 2017](#)). OPN has been found to play a role in cancer progression by enhancing proliferation, survival, motility and invasion of tumor cells in a range of cancers. OPN was upregulated at tumor sites and in blood of the patients, with the level correlating with tumor stage and aggressiveness ([Castello *et al.* 2017](#)). High levels of OPN have also been detected in several autoimmune diseases including multiple sclerosis and rheumatoid arthritis ([Clemente *et al.* 2016](#)).

The biotinylated Mouse anti Human osteopontin antibody, clone F03-4E8 (MCA6263B) can be used as a detection antibody in a sandwich ELISA with the purified Mouse anti Human osteopontin antibody, clone F11-4C11 ([MCA6262GA](#)) as the capture antibody.

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.

Guarantee

12 months from date of despatch

**Health And Safety
Information**

Material Safety Datasheet documentation #10041 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA6263B>
10041

Regulatory

For research purposes only

Related Products

Recommended Useful Reagents

[MOUSE ANTI HUMAN OSTEOPONTIN \(MCA6262GA\)](#)

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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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