

Datasheet: AHP961

Description:	RABBIT ANTI HUMAN BMP-7
Specificity:	BMP-7
Other names:	OP-1
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	50 µg

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
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (1)	▪			
ELISA	▪			0.5ug/ml
Immunoprecipitation			▪	
Western Blotting	▪			0.1 - 0.2ug/ml

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.

Target Species	Human
Product Form	Purified IgG - liquid
Antiserum Preparation	Antisera to human BMP-7 were raised by repeated immunisations of rabbits with highly purified antigen. Purified IgG was prepared by affinity chromatography.
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃)

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Recombinant human BMP-7.
External Database Links	<p>UniProt: P18075 Related reagents</p> <p>Entrez Gene: 655 BMP7 Related reagents</p>
Synonyms	OP1
RRID	AB_566393
Specificity	<p>Rabbit anti Human BMP-7 antibody recognizes the disulphide-linked homodimeric cysteine knot protein known as human Bone Morphogenetic Protein 7 (BMP-7) or Osteogenic protein 1 (OP-1). BMP-7 is a member of the transforming growth factor beta (TGF-β) superfamily and one of a number of osteogenic proteins shown to induce bone and cartilage formation, and to play an important role in developmental processes, including cell proliferation, differentiation, apoptosis and morphogenesis.</p> <p>BMPs act through binding with a receptor complex consisting of type I and type II serine/threonine kinases, resulting ultimately in the activation of the Smad protein and mitogen-activated protein kinase (MAPK) signaling pathways. Several antagonist proteins, including, noggin, chordin, gremlin and follistatin, are responsible for modulating the signaling effects of BMPs, through the binding and blocking of receptor ligands, thereby preventing activation.</p> <p>BMP-7 is involved during ontogeny of the kidney with prominent expression in renal tubules. Experimental diabetic nephropathy indicates BMP-7 has antifibrogenic properties and appears to act as an antagonist to TGF-β (Wang et al. 2001 & Godin et al. 1998).</p>
References	<p>1. Delpech, P.O. <i>et al.</i> (2014) Effects of warm ischaemia combined with cold preservation on the hypoxia-inducible factor 1α pathway in an experimental renal autotransplantation model. Br J Surg. 101 (13): 1739-50.</p>
Further Reading	<p>1. Balemans, W. & Van Hul, W. (2002) Extracellular regulation of BMP signaling in vertebrates: a cocktail of modulators. Dev Biol. 250 (2): 231-50.</p> <p>2. Sebald, W. <i>et al.</i> (2004) Molecular recognition in bone morphogenetic protein (BMP)/receptor interaction. Biol Chem. 385 (8): 697-710.</p> <p>3. Wang, S.N. <i>et al.</i> (2001) Loss of tubular bone morphogenetic protein-7 in diabetic nephropathy. J Am Soc Nephrol. 12 (11): 2392-9.</p> <p>4. Godin, R.E. <i>et al.</i> (1998) Regulation of BMP7 expression during kidney development. Development. 125 (17): 3473-82.</p>

Storage This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee 12 months from date of despatch

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

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Recommended Useful Reagents

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)

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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
'M389264:210806'

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