Datasheet: 7170-6216

BATCH NUMBER 169112

Description:	MOUSE ANTI HUMAN PARATHYROID HORMONE
Specificity:	PARATHYROID HORMONE
Other names:	PTH
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	BGN/1F8
Isotype:	IgG1
Quantity:	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.

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Frozen	▪			
Immunohistology - Paraffin	▪			
ELISA	▪			1/2 000 - 1/20 000

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.

Target Species

Human

Species Cross Reactivity

Reacts with: Rat, Mouse

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide (NaN_3)
Carrier Free	Yes
Approx. Protein Concentrations	1.0 mg/ml
Immunogen	Synthetic peptide corresponding to amino acids 1-34 of mature PTH conjugated to a proprietary carrier molecule
External Database Links	**UniProt:** P01270 Related reagents **Entrez Gene:** 5741 PTH Related reagents
RRID	AB_620616
Specificity	**Mouse anti Human parathyroid hormone monoclonal antibody, clone BGN/1F8** recognizes human parathyroid hormone (PTH) also known as Parathyrin. PTH is a hormone produced by the parathyroid gland responsible for the regulation of calcium and phosphorus concentrations in extracellular fluid (Brown 1983). Human parathyroid hormone is produced in the parathyroid gland as a 115 amino acid single chain polypeptide, bearing a 25 amino acid signal peptide, a 6 amino acid pro-peptide sequence and an 84 amino acid mature hormone. (Keutmann *et al.* 1978). Defects in the PTH gene are a cause of familial isolated hypoparathyroidism (FIH), a condition characterized by hypocalcemia and hyperphosphatemia owing to levels of parathyroid hormone being insufficient to maintain extracellular calcium concentrations within normal parameters. Clinical features of FIH include cramps, seizures and tetany (Arnold *et al.* 1990). More rarely, hypoparathyroidism like disease, Pseudohypothyroidism (PHP1A) may be caused by mutations in the GNAS gene (Mantovani & Spada 2006) or defects in the PTHR1 gene (Cohen 2002) leading to Jansen metaphyseal chondrodysplasia (JMC), conditions where end organ resistance to PTH function exists .
References	1. Nechama, M. *et al.* (2009) The peptidyl-prolyl isomerase Pin1 determines parathyroid hormone mRNA levels and stability in rat models of secondary hyperparathyroidism. J Clin Invest. 119: 3102-14. 2. Meir, T. *et al.* (2009) Deletion of the vitamin D receptor specifically in the parathyroid demonstrates a limited role for the receptor in parathyroid physiology. Am J Physiol Renal Physiol. 297: F1192-8. 3. Arrighi, I. *et al.* (2009) Bone healing induced by local delivery of an engineered parathyroid hormone prodrug. Biomaterials. 30: 1763-71. 4. Galitzer, H. *et al.* (2010) Parathyroid cell resistance to fibroblast growth factor 23 in secondary hyperparathyroidism of chronic kidney disease. Kidney Int. 77: 211-8.

5. Ferrè, S. *et al.* (2013) Early Development of Hyperparathyroidism Due to Loss of PTH Transcriptional Repression in Patients With HNF1β Mutations? J Clin Endocrinol Metab. 98: 4089-96.
6. Nakamura, T. *et al.* (2025) Molecular mechanism for transcriptional regulation of the parathyroid hormone gene by Epiprofin. FEBS J. Mar 31 [Epub ahead of print].

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: https://www.bio-rad-antibodies.com/SDS/7170-6216
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
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

Product inquiries: www.bio-rad-antibodies.com/technical-support

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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Printed on 14 Jul 2025