

Datasheet: 7170-6216

| Description: | MOUSE ANTI HUMAN PARATHYROID HORMONE | | |
|---------------|--------------------------------------|--|--|
| Specificity: | PARATHYROID HORMONE | | |
| Other names: | РТН | | |
| Format: | Purified | | |
| Product Type: | Monoclonal Antibody | | |
| Clone: | BGN/1F8 | | |
| Isotype: | lgG1 | | |
| Quantity: | 0.2 mg | | |
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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 <u>www.bio-rad-antibodies.com/protocols</u> . | | | | | | |
| | Immunohistology - Frozen | Yes | No | Not Determined | Suggested Dilution | | |
| | Immunohistology - Paraffin | - | | | | | |
| | ELISA | - | | | 1/2 000 - 1/20 000 | | |
| | Where this product has not | been test | ed for use i | n 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. | | | | | | |
| Product Form | Purified IgG - liquid | | | | | | |
| Preparation | Purified IgG prepared by affinity chromatography on Protein A | | | | | | |
| 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 | UniProt: | | | | | |
|----------------------------------|--|--|--|--|--|--|
| Links | P01270 Related reagents | | | | | |
| | Entrez Gene: | | | | | |
| | 5741 PTH Related reagents | | | | | |
| 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 <i>et al.</i> 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 (<u>Arnold <i>et al.</i></u> 1990). More rarely, hypoparathyroidism like disease, Pseudohypothyroidism (PHP1A) may be caused by mutations in the GNAS gene (<u>Mantovani & Spada 2006</u>) or defects in the PTHR1 gene (<u>Cohen 2002</u>) leading to Jansen metaphyseal chondrodysplasia (<u>JMC</u>), conditions where end organ resistance to PTH function exists . | | | | | |
| | | | | | | |
| References | Nechama, M. <i>et al.</i> (2009) The peptidyl-prolyl isomerase Pin1 determines parathyroid hormone mRNA levels and stability in rat models of secondary hyperparathyroidism. <u>J Clin Invest. 119:</u> <u>3102-14.</u> Galitzer, H. <i>et al.</i> (2010) Parathyroid cell resistance to fibroblast growth factor 23 in secondary hyperparathyroidism of chronic kidney disease. <u>Kidney Int. 77: 211-8.</u> | | | | | |
| | Meir, T. <i>et al.</i> (2009) Deletion of the vitamin D receptor specifically in the parathyroid demonstrates a limited role for the receptor in parathyroid physiology. <u>Am J Physiol Renal Physiol.</u> <u>297: F1192-8.</u> Ferrè, S. <i>et al.</i> (2013) Early Development of Hyperparathyroidism Due to Loss of PTH Transcriptional Repression in Patients With HNF1β Mutations? <u>J Clin Endocrinol Metab. 98:</u> | | | | | |
| | 4089-96. 5. Arrighi, I. <i>et al.</i> (2009) Bone healing induced by local delivery of an engineered parathyroid hormone prodrug. <u>Biomaterials. 30: 1763-71.</u> | | | | | |
| 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. | | | | | |
| Shelf Life | 18 months from date of despatch. | | | | | |
| Health And Safety Information | Material Safety Datasheet documentation #10040 available at: 10040: <u>https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</u> | | | | | |
| Regulatory | For research purposes only | | | | | |
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Related Products

Recommended Secondary Antibodies

| Goat Anti Mouse IgG (STAR76) | RPE | | | |
|---|--|--|--|--|
| Goat Anti Mouse IgG IgA IgM (STAR87) <u>Alk. Phos.</u> , <u>HRP</u> | | | | |
| Rabbit Anti Mouse IgG (STAR9) | <u>FITC</u> | | | |
| Goat Anti Mouse IgG (STAR77) | HRP | | | |
| Rabbit Anti Mouse IgG (STAR12) | RPE | | | |
| Goat Anti Mouse IgG (Fc) (STAR120) | FITC, HRP | | | |
| Rabbit Anti Mouse IgG (STAR8) | DyLight®800 | | | |
| Goat Anti Mouse IgG (STAR70) | <u>FITC</u> | | | |
| Rabbit Anti Mouse IgG (STAR13) | HRP | | | |
| Human Anti Mouse IgG1 (HCA036) | HRP | | | |
| Goat Anti Mouse IgG (H/L) (STAR117) | Alk. Phos., DyLight®488, DyLight®549, | | | |
| | DyLight®649, DyLight®680, DyLight®800, | | | |
| | <u>FITC, HRP</u> | | | |

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

| North & South | Tel: +1 800 265 7376 | Worldwide | Tel: +44 (0)1865 852 700 | Europe | Tel: +49 (0) 89 8090 95 21 |
|---------------|---------------------------------|-----------|---------------------------------|--------|--------------------------------------|
| America | Fax: +1 919 878 3751 | | Fax: +44 (0)1865 852 739 | | Fax: +49 (0) 89 8090 95 50 |
| | Email: antibody_sales_us@bio-ra | d.com | Email: antibody_sales_uk@bio-ra | ad.com | Email: antibody_sales_de@bio-rad.com |

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Printed on 20 Jun 2018

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