Datasheet: MCA5749

Description:	MOUSE ANTI HUMAN CALCITONIN RECEPTOR
Specificity:	CALCITONIN RECEPTOR
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	30/7-9B4
Isotype:	IgG2a
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
Flow Cytometry	▪			
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (1)	▪			
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			
Immunofluorescence	▪			
Functional Assays			▪	

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.

(1)**PLP fixation is recommended for optimal results.**

Target Species

Human

Species Cross Reactivity

Reacts with: Rabbit, Bovine

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 G-Sepharose/dialysed against PBS from tissue culture supernatant.

Preservative Stabilisers

0.09% Sodium Azide (NaN_3)

Approx. Protein Concentrations

IgG concentration 1.0mg/ml

Immunogen

Synthetic peptide derived from sequence situated on the extra-cellular domain of human calcitonin

	receptor.
External Database Links	**UniProt:** P30988 Related reagents **Entrez Gene:** 799 CALCR Related reagents
Fusion Partners	Spleen cells from immunised mice were fused with cells of the mouse SP2/0 myeloma cell line.
Specificity	**Mouse anti Human Calcitonin Receptor antibody, clone 30/7-9B4** recognizes the human calcitonin receptor, a 508 amino acid multi pass transmembrane membrane glycoprotein with seven transmembrane domains, coupled to G protein messenger systems. The calcitonin receptor is expressed in kidney, central and peripheral nervous systems and on osteoclasts. It is also expressed in a number of tissues during the development of the embryo and may be important in foetal morphogenesis. Mouse anti Human Calcitonin Receptor antibody, clone 30/7-9B4 recognizes an epitope within the extra-cellular domain, the epitope is common to both C1a and C1b human isoforms. Calcitonin receptor expression is elevated in the inflammatory cells associated with diseased arteries and atherosclerotic plaques (Wookey *et al.* 2009) expression has also been noted within malignant cells of glioblastoma multiforme (Wookey *et al.* 2012).Several different isoforms of the calcitonin receptor, a result of alternative splicing and promotor usage have been identified. Mouse anti Human Calcitonin Receptor antibody, clone 30/7-9B4 was raised against the canonical isoform 1 but has been shown to bind to a truncated isoform lacking the N-terminal region of the receptor (Qi *et al.* 2012). The calcitonin receptor can associate with RAMP1, 2 and 3 to form discrete receptors for amylin. Mouse anti human calcitonin receptor antibody, clone 30/7-9B4 has been successfully used for demonstrating calcitonin receptor expression on human cryostat tissue section by immunohistochemistry and western blotting (Wookey *et al.* 2012).
Histology Positive Control Tissue	Human kidney
References	1. Wookey, P.J. *et al.* (2012) The expression of calcitonin receptor detected in malignant cells of the brain tumour glioblastoma multiforme and functional properties in the cell line A172. Histopathology. 60 (6): 895-910. 2. Qi, T. *et al.* (2013) Receptor activity-modifying protein-dependent impairment of calcitonin receptor splice variant Δ(1-47)hCT((a)) function Br J Pharmacol. 168: 644-57. 3. Chen-An, P. *et al.* (2012) The Inhibitory Effect of Salmon Calcitonin on Tri-Iodothyronine Induction of Early Hypertrophy in Articular Cartilage PLoS One. 7(6): e40081.
Storage	Store at +4^{o}C or at -20^{o}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	Material Safety Datasheet documentation #10040 available at:

Information	10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR9...)	FITC
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	FITC, HRP

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL (MCA929)

Recommended Useful Reagents

HISTAR DETECTION SYSTEM (STAR3000B)

North & South America
Tel: +1 800 265 7376
Fax: +1 919 878 3751
Email: antibody_sales_us@bio-rad.com

Worldwide
Tel: +44 (0)1865 852 700
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Printed on 28 Jul 2018