

Datasheet: AHP635T

Description:	RABBIT ANTI RAT CALCITONIN RECEPTOR
Specificity:	CALCITONIN RECEPTOR
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	10 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	•			1/10 - 1/50
Immunohistology - Paraffin (1)	•			1/10 - 1/50
ELISA	•			
Immunofluorescence				

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1) The use of 4% paraformal dehyde fixation, rather than formalin fixation is recommended.

A sensitive detection system is also recommended. e.g. A catalysed signal amplification system.

Target Species	Rat	
Species Cross Reactivity	Reacts with: Mouse, Human, Fish, Atlantic Stingray N.B. Antibody reactivity and working conditions may vary between s	pecies.
Product Form	Purified IgG - liquid	
Antiserum Preparation	Antisera to calcitonin receptor were raised by repeated immunisation antigen. Purified IgG was prepared from whole serum by affinity chro	• • •
Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	0.09% Sodium Azide	
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml	
Immunogen	Synthetic peptide derived from a C-terminal sequence of rat calciton	in receptor.

External Database Links

UniProt:

P32214 Related reagents

Entrez Gene:

116506 Calcr Related reagents

Specificity

Rabbit anti Rat Calcitonin Receptor antibody recognizes the calcitonin receptor in human, mouse and rat. The calcitonin receptor is a seven transmembrane domain cell surface protein which is coupled to G protein messenger systems. Rabbit anti Rat Calcitonin Receptor antibody recognizes an epitope within the cytoplasmic domain that is common to both C1a and C1b rat isoforms.

Calcitonin receptor is expressed in kidney, central and peripheral nervous systems and in osteoclasts. It is also expressed in a number of tissues during the development of the embryo and may be important in foetal morphogenesis.

Histology Positive Control Tissue

Kidney, cultured osteoclasts.

References

- 1. Wookey, P.J. *et al.* (2008) Calcitonin receptor immunoreactivity associated with specific cell types in diseased radial and internal mammary arteries. <u>Histopathology. 52 (5): 605-12.</u>
- 2. Tolcos, M. *et al.* (2003) Ontogeny of calcitonin receptor mRNA and protein in the developing central nervous system of the rat. <u>J Comp Neurol</u>. 456 (1): 29-38.
- 3. Tikellis, C. *et al.* (2003) Calcitonin receptor isoforms expressed in the developing rat kidney. Kidney Int. 63: 416-26.
- 4. Gnocchi, V.F. *et al.* (2009) Further characterisation of the molecular signature of quiescent and activated mouse muscle satellite cells. <u>PLoS One. 4(4):e5205.</u>
- 5. Becskei, C. *et al.* (2004) Immunohistochemical mapping of calcitonin receptors in the adult rat brain. <u>Brain Res. 1030: 221-33.</u>
- 6. Gooi, J.H. *et al.* (2010) Calcitonin impairs the anabolic effect of PTH in young rats and stimulates expression of sclerostin by osteocytes. <u>Bone. 46: 1486-97.</u>
- 7. Gelsleichter, J.J. (2006) MCAA: Development of laboratory skills in molecular biology to examine patterns of calcitonin and calcitonin receptor gene expression in cartilaginous fishes. <u>Mote technical report 1392.</u>
- 8. Wookey, P.J. *et al.* (2012) Transient expression of the calcitonin receptor by enteric neurons of the embryonic and early post-natal mouse. <u>Cell Tissue Res. 347: 311-7.</u>
- 9. Mourikis, P. *et al.* (2012) Cell-autonomous Notch activity maintains the temporal specification potential of skeletal muscle stem cells. <u>Development</u>. 139: 4536-48.
- 10. Park, J.K. *et al.* (2012) Increased generation of TRAP expressing multinucleated giant cells in patients with granulomatosis with polyangiitis. <u>PLoS One. 7: e42659.</u>
- 11. Le Roux, I. *et al.* (2015) Numb is required to prevent p53-dependent senescence following skeletal muscle injury. <u>Nat Commun. 6: 8528.</u>
- 12. Almeida, C.F. *et al.* (2016) Muscle Satellite Cells: Exploring the Basic Biology to Rule Them. Stem Cells Int. 2016: 1078686.
- 13. Yamaguchi, M. *et al.* (2015) Calcitonin Receptor Signaling Inhibits Muscle Stem Cells from Escaping the Quiescent State and the Niche. <u>Cell Rep. 13 (2): 302-14.</u>
- 14. Wookey, P.J. (2009) A Review of Calcitonin Receptor Expression in Embryonic, Foetal and Adult Tissues, with an Hypothesis on the Connection Between Expression During Foetal Development and Disease <u>The Open Zoology Journal 2: 53-61.</u>

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life	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
Sheep Anti Rabbit IgG (STAR35...) RPE
Goat Anti Rabbit IgG (H/L) (STAR124...) HRP

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

Sheep Anti Rabbit IgG (2AB02...) Biotin

Sheep Anti Rabbit IgG (STAR36...) <u>DyLight®488, DyLight®549, DyLight®649,</u>

DyLight®680, DyLight®800

Recommended Useful Reagents

ANTIGEN RETRIEVAL BUFFER, pH8.0 (BUF025A)
ANTIGEN RETRIEVAL BUFFER, pH8.0 (BUF025C)

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