

Datasheet: AHP206 BATCH NUMBER 147166

Description:	SHEEP ANTI HUMAN CARBONIC ANHYDRASE II
Specificity:	CARBONIC ANHYDRASE II
Other names:	CA2
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	1 ml

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			-		
	ELISA					
	Immunoprecipitation					
	Western Blotting	-			1/1000	
	Immunodiffusion	-				
	Immunofluorescence	•				
	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					
	Target Species	Human				
Product Form	Purified IgG - liquid					
Antiserum Preparation	Antisera to human carbon with highly purified antige chromatography.	nic anhydr en. Purified	rase II wei d IgG was	e raised by repeated prepared from whole	immunisation of sheep serum by ion exchange	
Buffer Solution	Glycine buffered saline					

Treservative	0.09% Sodium Azide			
Stabilisers	0.1% EACA			
	1mM EDTA			
	0.01% Benzamidine			
Immunogen	Purified human carbonic anhydrase II (CAII) prepared from erythrocytes.			
External Database				
Links	UniProt:			
	P00918 Related reagents			
	Entroz Gono:			
	Too CA2 Related reagents			
חופפ	AD 201015			
	AB_321213			
Specificity	Sheep anti Human carbonic anhydrase II antibody recognizes human carbonic anhydrase II, also known as Carbonate dehydratase II or Carbonic anhydrase C. Carbonic anhydrase II is a 259 amino acid ~30 kDa enzyme essential for bone resorption and osteoclast differrentiation.			
	Mutations in the CA2 gene has been identified as the cause of osteopetrosis, autosomal recessive 3 (<u>OPTB3</u>), a rare disease characterized by particularly dense bone, cerebral calcification and renal tubular acidosis (<u>Shah <i>et al</i> 2004</u>).			
	Product identity is confirmed by double diffusion vs human CAIL No reactivity is seen in			
	immunodiffusion against CAI.			
Western Blotting	immunodiffusion against CAI.			
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	8. Salman, S. <i>et al.</i> (2014) Chronic opioids regulate K _{ATP} channel subunit Kir6.2 and
	carbonic anhydrase I and II expression in rat adrenal chromaffin cells via HIF-2 α and
	protein kinase A. <u>Am J Physiol Cell Physiol. 307: C266-77.</u>
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	tubule dysfunction. <u>Kidney Int. 74 (1): 52-61.</u>
	10. Sterling, D. et al. (2002) The functional and physical relationship between the DRA
	bicarbonate transporter and carbonic anhydrase II. Am J Physiol Cell Physiol. 283 (5):
	<u>C1522-9.</u>
	11. Alvarez, L. et al. (2001) Carbonic anhydrase II associated with plasma membrane in a
	human pancreatic duct cell line (CAPAN-1). J Histochem Cytochem. 49 (8): 1045-53.
	12. Alvarez, B.V. et al. (2003) Direct extracellular interaction between carbonic anhydrase
	IV and the human NBC1 sodium/bicarbonate co-transporter. <u>Biochemistry. 42 (42):</u>
	<u>12321-9.</u>
	13. Sterling, D. et al. (2002) The extracellular component of a transport metabolon.
	Extracellular loop 4 of the human AE1 CI-/HCO3- exchanger binds carbonic anhydrase IV.
	<u>J Biol Chem. 277 (28): 25239-46.</u>
Storage	Store at $\pm 4^{\circ}$ 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.
Guarantee	12 months from date of despatch
Health And Safety	Material Safety Datasheet documentation #10087 available at:
Information	https://www.bio-rad-antibodies.com/SDS/AHP206
	10087
Regulatory	10087 For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Sheep IgG (H/L) (5184-2304...) Biotin

North & South	Tel: +1 800 265 7376 Worldwide	Tel: +44 (0)1865 852 700 E	urope	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-rad.com	Email: antibody_sales_uk@bio-rad.co	om	Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M364106:200529'

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