

**DATASHEET**

**Carbonic Anhydrase 14 Rabbit Monoclonal Antibody(ARB580)**

CAT. NO. ARB6872

**KEY FEATURES**

Target	Carbonic Anhydrase 14	Clonality	Monoclonal
Clone ID	ARB580	Applications	IHC
Source / Host	Rabbit	Dilution	1:100-1:200
Reactivity	Human	Storage	at-20°C

**BACKGROUND**

Carbonic Anhydrase 14 (CA14) is a membrane-associated zinc metalloenzyme belonging to the carbonic anhydrase family. It catalyzes the reversible hydration of carbon dioxide to bicarbonate and protons. In the central nervous system, it contributes critically to neuronal signaling, cerebrospinal fluid production, and possibly neuroprotection. Carbonic Anhydrase 14 (CA14) is predominantly expressed in brain and liver. In tumor tissue, it is mainly expressed in malignant melanoma and hepatocellular carcinoma. Carbonic Anhydrase 14 (CA14) demonstrates emerging diagnostic and prognostic relevance in specific malignancies, notably hepatocellular carcinoma (HCC) and malignant melanoma. In HCC, CA14 is frequently overexpressed in tumor tissues compared to adjacent non-tumorous liver, correlating with advanced tumor stage, vascular invasion and poorer overall survival, suggesting utility as a prognostic biomarker. In malignant melanoma, CA14 expression is linked to tumor progression, potentially contributing to extracellular acidosis, invasion and immune evasion within the tumor microenvironment.

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

IHC	1:100 - 1:200
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\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

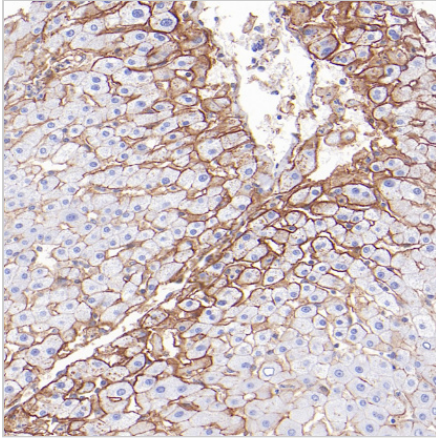
Predicted Molecular Wt	38kDa
Purity	ProA affinity purified IgG
Subcellular location	Membrane
Swissprot ID	Q9UXU7
Immunogen	Synthetic peptide.
Storage Buffer	PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%
Recommended Method	Heat induced epitope retrieval with Tris-EDTA buffer (pH 9.0), primary antibody incubate at RT (18°C-25°C) for 30 minutes.

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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**DATA**

Immunohistochemical staining of human liver tissue using Carbonic Anhydrase 14 Rabbit Monoclonal Antibody(ARB580)

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.

More information: [www.arexbio.com](http://www.arexbio.com)