



# Anti-CA9 monoclonal antibody, clone 404234 (DCABY-4025)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Antigen Description</b>	Carbonic anhydrases catalyze the reversible reaction of $\text{CO}_2 + \text{H}_2\text{O} = \text{HCO}_3^- + \text{H}^+$ , which is fundamental to many processes such as respiration, renal tubular acidification and bone resorption. Human members of the CAs are secreted (CA6), membrane-bound (CA4, 9 to 12 and 14), cytosolic (CA1 to 3, 7, 8 and 13) or mitochondrial (CA5A and 5B). Some CAs may serve as markers for tumors and hypoxia. A subset of CAs lack CA activity due to point mutations but retain esterase function.
<b>Specificity</b>	Detects human Carbonic Anhydrase IX (CA9) in direct ELISAs. In direct ELISAs, this antibody does not cross-react with recombinant mouse (rm) CA9 or with rhCA1, 2, 3, 4, 5A, 6, 7, 8, 10, 12, 13, or 14.
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Carbonic Anhydrase IX. Pro59-Asp414 Accession Number Q16790
<b>Isotype</b>	IgG2a
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	404234
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	Flow Cytometry, Immunoprecipitation, ELISA Capture (Matched Pair)
<b>Format</b>	Liquid
<b>Size</b>	500 µg

<b>Buffer</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.
<b>Preservative</b>	None
<b>Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month from date of receipt, 2 to 8 °C, reconstituted. 6 months from date of receipt, -20 to -70 °C, reconstituted.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">CA9 carbonic anhydrase IX [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	CA9
<b>Synonyms</b>	CA9; carbonic anhydrase IX; MN; CAIX; carbonic anhydrase 9; pMW1; CA-IX; P54/58N; membrane antigen MN; carbonic dehydratase; carbonate dehydratase IX; RCC-associated antigen G250; RCC-associated protein G250; renal cell carcinoma-associated antigen G250;
<b>Entrez Gene ID</b>	<a href="#">768</a>
<b>Protein Refseq</b>	<a href="#">NP_001207</a>
<b>UniProt ID</b>	<a href="#">Q16790</a>
<b>Chromosome Location</b>	9p13.3
<b>Pathway</b>	Cellular response to hypoxia; Cellular responses to stress; HIF-1-alpha transcription factor network; Metabolism; Nitrogen metabolism; Regulation of Hypoxia-inducible Factor (HIF) by oxygen; Regulation of gene expression by Hypoxia-inducible Factor; Rever
<b>Function</b>	carbonate dehydratase activity; zinc ion binding;