



Human CA9 peptide (DAG-P0295)

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

PRODUCT INFORMATION

Antigen Description	Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. They show extensive diversity in tissue distribution and in their subcellular localization. CA IX is a transmembrane protein and the only tumor-associated carbonic anhydrase isoenzyme known. It is expressed in all clear-cell renal cell carcinoma, but is not detected in normal kidney or most other normal tissues. It may be involved in cell proliferation and transformation. This gene was mapped to 17q21.2 by fluorescence in situ hybridization, however, radiation hybrid mapping localized it to 9p13-p12. [provided by RefSeq, Jul 2008]
Specificity	Expressed primarily in carcinoma cells lines. Expression is restricted to very few normal tissues and the most abundant expression is found in the epithelial cells of gastric mucosa.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the alpha-carbonic anhydrase family.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	CA9 carbonic anhydrase IX [Homo sapiens (human)]
Official Symbol	CA9

Synonyms	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;
Entrez Gene ID	768
mRNA Refseq	NM_001216.2
Protein Refseq	NP_001207.2
UniProt ID	Q16790
Chromosome Location	9p13.3
Pathway	Cellular response to hypoxia, organism-specific biosystem; Cellular responses to stress, organism-specific biosystem; HIF-1-alpha transcription factor network, organism-specific biosystem; Metabolism, organism-specific biosystem; Nitrogen metabolism, organism-specific biosystem; Nitrogen metabolism, conserved biosystem; Regulation of Gene Expression by Hypoxia-inducible Factor, organism-specific biosystem; Regulation of Hypoxia-inducible Factor (HIF) by Oxygen, organism-specific biosystem; Rever
Function	carbonate dehydratase activity; zinc ion binding;