bs-4029R

CA9 Rabbit pAb

[**Primary Antibody**]

─ DATASHEET ─

Host: Rabbit

Clonality: Polyclonal

GeneID: 768

Target: CA9

Immunogen: KLH conjugated synthetic peptide derived from human Carbonate dehydratase IX: 251-350/459. < Extracellular >

Purification: affinity purified by Protein A

Concentration: 1mg/ml

**Storage:** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4℃. Store at -20℃ for one year. Avoid repeated freeze/thaw cycles.

Background: 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]

Isotype: IgG

SWISS: Q16790

Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
ICC/IF (1:25)

Reactivity: Human, Mouse, Rat (predicted: Pig, Cow, Dog, Horse)

Predicted MW.: 46 kDa

Subcellular Location: Cell membrane ,Nucleus

─ VALIDATION IMAGES ─
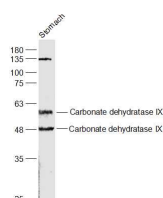
Sample: Stomach (Rat) Lysate at 40 ug Primary: Anti-Carbonate dehydratase IX (bs-4029R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 46 kD Observed band size: 48/58 kD
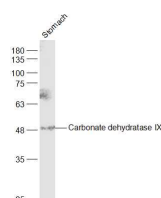

Sample: Stomach (Mouse) Lysate at 40 ug Primary: Anti-Carbonate dehydratase IX (bs-4029R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 46 kD Observed band size: 48 kD
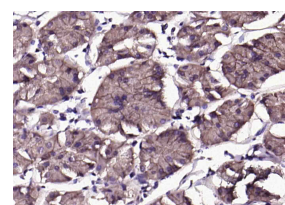
Paraformaldehyde-fixed, paraffin embedded (human stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37℃ for 30min; Incubation with (CA9) Polyclonal Antibody, Unconjugated (bs-4029R) at 1:200 overnight at 4℃, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.
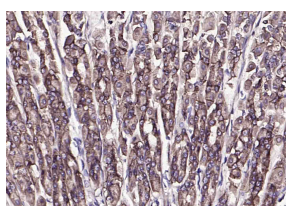
Paraformaldehyde-fixed, paraffin embedded (rat stomach); Antigen retrieval by boiling in sodium
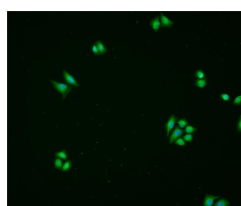
Hela cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking

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Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37℃ for 30min; Incubation with (CA9) Polyclonal Antibody, Unconjugated (bs-4029R) at 1:200 overnight at 4℃, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

buffer (normal goat serum, C-0005) at 37℃ for 20 min; Antibody incubation with (CA9) polyclonal Antibody, Unconjugated (bs-4029R) 1:25, 90 minutes at 37℃; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37℃ for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.

— SELECTED CITATIONS —

- **[IF=10.383]** Jiabao Ling. et al. Designing Lactate Dehydrogenase-Mimicking SnSe Nanosheets To Reprogram Tumor-Associated Macrophages for Potentiation of Photothermal Immunotherapy. ACS APPL MATER INTER. 2022;14(24):27651–27665 WB ;Mouse. 35675569

- **[IF=5.4]** Jialing Sun. et al. Investigating the molecular mechanism of Qizhu anticancer prescription in inhibiting hepatocellular carcinoma based on high-resolution mass spectrometry and network pharmacology. J ETHNOPHARMACOL. 2024 Feb;:117985 IHC,WB ;Mouse. 38417600

- **[IF=4.493]** Qin Wentao. et al. Systematic Construction and Validation of a Novel Ferroptosis-Related Gene Model for Predicting Prognosis in Cervical Cancer. J IMMUNOL RES. 2022;2022:2148215 IHC ;Human. 35935576

- **[IF=2.88]** Gogiraju, Rajinikanth, et al. "Endothelial p53 Deletion Improves Angiogenesis and Prevents Cardiac Fibrosis and Heart Failure Induced by Pressure Overload in Mice." Journal of the American Heart Association 4.2 (2015): e001770. IHC ;="Mouse". 25713289