Carbonic Anhydrase IX antibody [GT12]

Cat. No. GTX70020

| Host | Mouse | References (12) |
|--------------|---|--------------------------------|
| Clonality | Monoclonal | <mark>Package</mark> 100 μl |
| lsotype | lgG2b | |
| Applications | WB, ICC/IF, IHC-P, IHC-Fr, FCM, IP, IHC | |
| Reactivity | Human | |

PRODUCT

Summary

Carbonic Anhydrase IX antibody (CA9 antibody) detects carbonic anhydrase 9, a ~50 kDa transmembrane glycoprotein. CA9 expression is enhanced by HIF1-alpha signaling in various biological processes, including cell proliferation and transformation. Found in many tissues, CA9 overexpression promotes tumor growth in various cancers.

Applications

Application Note

For ICC/IF: Use at a dilution of 1:100-1:1000. For WB: Use at a dilution of 1:100-1:1000. For IHC-P: Use at a dilution of 1:100-1:1000. For FACS: Use at a dilution of 1:100-1:1000 for 1×10^{6} cells. For IP: Use at a concentration of 2-10 μ g/mg lysate. Optimal dilutions/concentrations should be determined by the researcher.

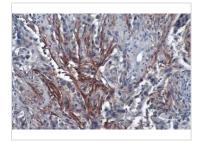
| Calculated MW | 50 kDa. (<u>Note</u>) |
|---------------|---|
| Product Note | Clone GT12 binds to linear repetitive epitope in the PG region and allows for selective detection of both native and denatured CA IX without cross-reactivity to other carbonic anhydrases. |

| Properties | | |
|---------------|--|--|
| Form | Liquid | |
| Buffer | PBS | |
| Preservative | No preservative | |
| Storage | Store as concentrated solution. Centrifuge briefly prior to opening vial. For short-term storage (1-2 weeks), store at 4°C. For long-term storage, aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles. | |
| Concentration | Batch dependent (Please refer to the vial label for the specific concentration.) | |
| Conjugation | Unconjugated | |
| Note | For laboratory research use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption. | |
| | Purchasers shall not, and agree not to enable third parties to, analyze, copy, reverse engineer or otherwise attempt to determine the structure or sequence of the product. | |



For full product information, images and publications, please visit our <u>website</u>.

DATA IMAGES

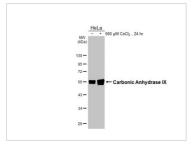


GTX70020 IHC-P Image

Carbonic Anhydrase IX antibody [GT12] detects Carbonic Anhydrase IX protein at cell membrane by immunohistochemical analysis.

Sample: Paraffin-embedded human cervical carcinoma.

Carbonic Anhydrase IX stained by Carbonic Anhydrase IX antibody [GT12] (GTX70020) diluted at 1:500. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



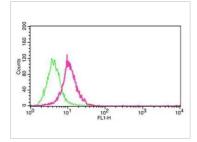
GTX70020 WB Image

Untreated (–) and treated (+) HeLa whole cell extracts (30 µg) were separated by 10% SDS-PAGE, and the membrane was blotted with Carbonic Anhydrase IX antibody [GT12] (GTX70020) diluted at 1:2500. The HRP-conjugated anti-mouse IgG antibody (GTX213111-01) was used to detect the primary antibody.



GTX70020 IHC-P Image

Immunohistochemical analysis of paraffin-embedded cervical CA tissue sections using anti-CAIX antibody [GT12] (GTX70020) at a dilution of 1:1000. The hypoxic regions of the tumor show positive CAIX staining.



GTX70020 FCM Image

Flow cytometry on HeLa cells (1x10⁶) stained with anti-CAIX antibody [GT12] (GTX70020) at a 1:1000 dilution. HeLa cells were untreated (green) or treated with 200 μ M CoCl2 (pink) for 48 hr.



For full product information, images and publications, please visit our <u>website</u>.

Date 2025 / 05 / 13 Page 2 of 2