

Carbonic Anhydrase IX Monoclonal Antibody (GT12)

Product Details

Size	100 µL
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG2b
Class	Monoclonal
Type	Antibody
Clone	GT12
Conjugate	Unconjugated
Immunogen	linear repetitive epitope in the PG region and allows for selective detection of both native and denatured Human CA IX.
Form	Liquid
Concentration	0.1 mg/mL
Purification	Protein G
Storage buffer	PBS
Contains	no preservative
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_2537837

Applications	Tested Dilution	Publications
Western Blot (WB)	1:100-1:1,000	1 Publication
Immunohistochemistry (IHC)	-	2 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:100-1:1,000	-
Immunohistochemistry (Frozen) (IHC (F))	Assay-dependent	1 Publication
Immunocytochemistry (ICC/IF)	1:100-1:1,000	-
Flow Cytometry (Flow)	1:100-1:1,000	-
Immunoprecipitation (IP)	2-10 µg/mg of lysate	-

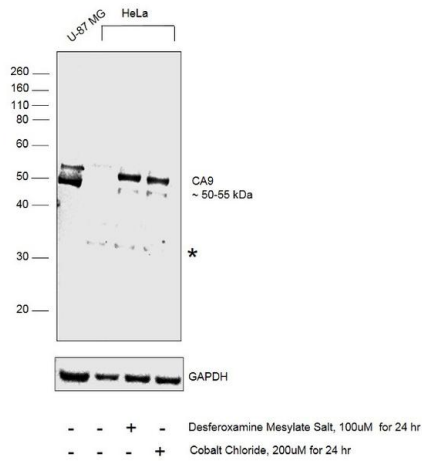
Product Specific Information

Store product as a concentrated solution. Centrifuge briefly prior to opening the vial.

Product Images For Carbonic Anhydrase IX Monoclonal Antibody (GT12)

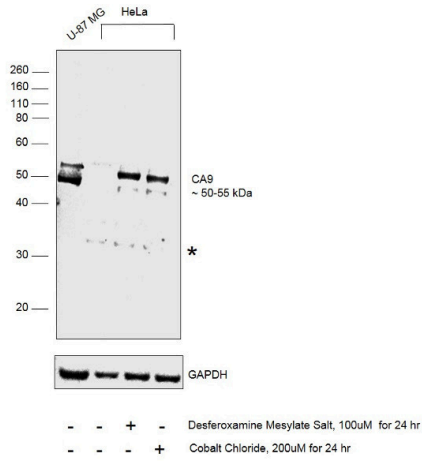
Carbonic Anhydrase IX Antibody (MA5-16318) in WB

Western blot was performed using Anti-Carbonic Anhydrase IX Monoclonal Antibody (Product # MA5-16318) and ~ 50-55 kDa bands corresponding to CA9 was observed across cell lines tested and increased upon Deferoxamine and Cobalt Chloride treatment in HeLa along with an uncharacterized band (*) at ~32 kDa. Whole cell extracts (30 µg lysate) of U-87 MG (Lane 1), HeLa (Lane 2), HeLa treated with Deferoxamine (100uM for 24 Hours) (Lane 3) and HeLa treated with Cobalt Chloride (200uM for 24 Hours) (Lane 4) were electrophoresed using NuPAGE® 4-12 % Bis-Tris gel (Product # NP0322BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:500 dilution) and detected by chemiluminescence with Goat anti-Mouse IgG (H+L), Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177, 1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).



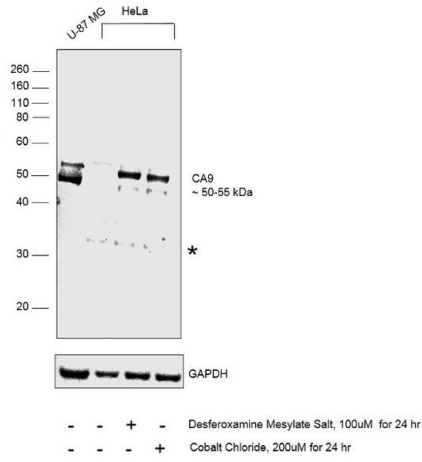
Carbonic Anhydrase IX Antibody (MA5-16318)

Antibody specificity was demonstrated by detection of differential basal expression of the target across cell models tested owing to their inherent genetic constitution. Higher expression of CA9 was observed in U-87 MG in comparison to HeLa using Anti-Carbonic Anhydrase IX Monoclonal Antibody (GT12) (Product # MA5-16318) in Western Blot. {RE}



Carbonic Anhydrase IX Antibody (MA5-16318)

Altered expression of proteins upon cell treatment demonstrates antibody specificity. Western blot using CA9 Polyclonal Antibody (Product # PA5-16318) shows increased expression of CA9 in HeLa upon Deferoxamine and Cobalt Chloride treatment. {TM}



4 References

Western Blot (1)

<p>The FEBS journal</p> <p>Mineralization of bone-related SaOS-2 cells under physiological hypoxic conditions.</p> <p>"Published figure using Carbonic Anhydrase IX monoclonal antibody (Product # MA5-16318) in Western Blot"</p> <p>Authors: Müller WE,Schröder HC,Tolba E,Diehl-Seifert B,Wang X</p>	<p>Year</p> <p>2016</p>
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Immunohistochemistry (2)

<p>Autophagy</p> <p>Hypoxia-induced autophagy drives colorectal cancer initiation and progression by activating the PRKC/PKC-EZR (ezrin) pathway.</p> <p>"MA5-16318 was used in Immunohistochemistry to observe significantly reduced in vivo tumor initiation and growth after a stable knockdown of ATG5."</p> <p>Authors: Qureshi-Baig K,Kuhn D,Viry E,Pozdeev VI,Schmitz M,Rodriguez F,Ullmann P,Koncina E,Nurmik M,Frasquilho S,Nazarov PV,Zuegel N,Boulmont M,Karapetyan Y,Antunes L,Val D,Mittelbronn M,Janji B,Haan S,Letellier E</p>	<p>Year</p> <p>2020</p> <p>Species</p> <p>Human</p> <p>Dilution</p> <p>1:200</p>
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<p>Journal of controlled release : official journal of the Controlled Release Society</p> <p>Linker stability influences the anti-tumor activity of acetazolamide-drug conjugates for the therapy of renal cell carcinoma.</p> <p>"MA5-16318 was used in Immunohistochemistry-immunofluorescence to show that small molecule-drug conjugate (SMDC) products, obtained by the coupling of acetazolamide with monomethyl auristatin E (MMAE) using dipeptide linkers, display a potent anti-tumoral activity in mice bearing xenografted SKRC-52 renal cell carcinomas."</p> <p>Authors: Cazzamalli S,Corso AD,Neri D</p>	<p>Year</p> <p>2017</p> <p>Species</p> <p>Human</p>
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Immunohistochemistry (Frozen) (1)

<p>Autophagy</p> <p>Hypoxia-induced autophagy drives colorectal cancer initiation and progression by activating the PRKC/PKC-EZR (ezrin) pathway.</p> <p>"MA5-16318 was used in Immunohistochemistry to observe significantly reduced in vivo tumor initiation and growth after a stable knockdown of ATG5."</p> <p>Authors: Qureshi-Baig K,Kuhn D,Viry E,Pozdeev VI,Schmitz M,Rodriguez F,Ullmann P,Koncina E,Nurmik M,Frasquilho S,Nazarov PV,Zuegel N,Boulmont M,Karapetyan Y,Antunes L,Val D,Mittelbronn M,Janji B,Haan S,Letellier E</p>	<p>Year</p> <p>2020</p> <p>Species</p> <p>Human</p> <p>Dilution</p> <p>1:200</p>
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