

# Product Datasheet

## Carbonic Anhydrase II/CA2 Antibody (11A1) NBP2-76974

Unit Size: 100 ul

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**NBP2-76974****Carbonic Anhydrase II/CA2 Antibody (11A1)**

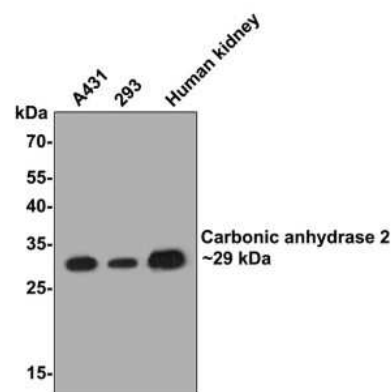
Product Information	
<b>Unit Size</b>	100 ul
<b>Concentration</b>	2 mg/ml
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	11A1
<b>Preservative</b>	0.05% Sodium Azide
<b>Isotype</b>	IgG2a
<b>Purity</b>	Immunogen affinity purified
<b>Buffer</b>	PBS (pH7.4), 0.2% BSA, 50% Glycerol
<b>Target Molecular Weight</b>	29 kDa

Product Description	
<b>Host</b>	Mouse
<b>Gene Symbol</b>	CA2
<b>Species</b>	Human, Mouse, Rat
<b>Reactivity Notes</b>	Mouse blocking reagent may be needed for IHC and ICC experiments to reduce high background signal. You can find these reagents under catalog numbers PK-2200-NB and MP-2400-NB. Please contact Technical Support if you have any. Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Mouse-On-questions.
<b>Immunogen</b>	Recombinant protein within Human Carbonic Anhydrase II/CA2 aa 63-240 / 260. (SwissProt: P00918 Human; SwissProt: P00920 Mouse; SwissProt: P27139 Rat)

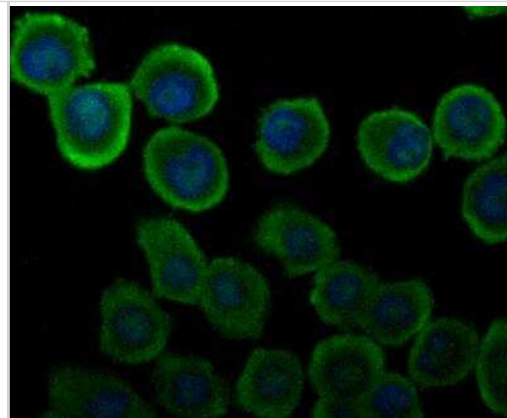
Product Application Details	
<b>Applications</b>	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
<b>Recommended Dilutions</b>	Western Blot 1:500-1:2000, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence 1:50-1:200, Immunohistochemistry-Paraffin 1:50-1:200

**Images**

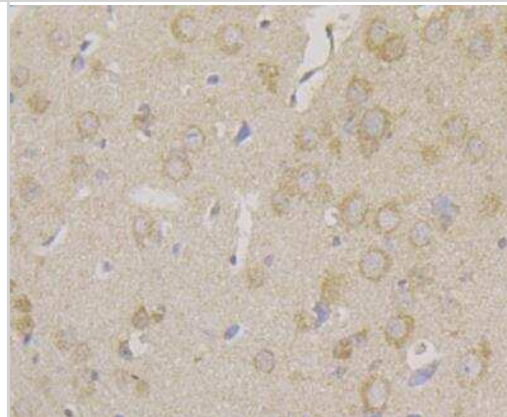
Western Blot: Carbonic Anhydrase II/CA2 Antibody (11A1) [NBP2-76974] - Analysis of Carbonic anhydrase II/CA2 on different lysates with Mouse anti-Carbonic anhydrase II/CA2 antibody at 1/500 dilution. Lane 1: A431 cell lysate Lane 2: 293 cell lysate Lane 3: Human kidney tissue lysate(20 ug/Lane) Lysates/proteins at 10 ug/Lane. Predicted band size: 29 kDa Observed band size: 29 kDa Exposure time: 2 minutes; 12% SDS-PAGE gel. Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody at 1/500 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Mouse IgG - HRP Secondary Antibody at 1:20,000 dilution was used for 1 hour at room temperature.



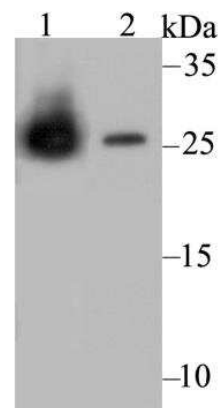
**Immunocytochemistry/Immunofluorescence:** Carbonic Anhydrase II/CA2 Antibody (11A1) [NBP2-76974] - ICC staining Carbonic anhydrase 2 in AGS cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with Carbonic anhydrase 2 monoclonal antibody at a dilution of 1:100 for at least 1 hour at room temperature, washed with PBS. Alexa Fluor 488 Goat anti-Mouse IgG was used as the secondary antibody at 1/100 dilution. The nuclear counter stain is DAPI (blue).



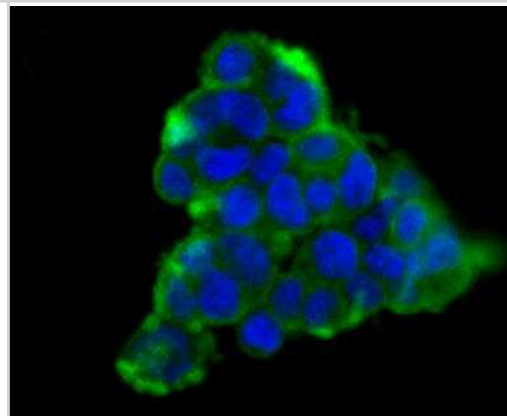
**Immunohistochemistry:** Carbonic Anhydrase II/CA2 Antibody (11A1) [NBP2-76974] - Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-Carbonic anhydrase 2 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the antibody at 1/100 dilution, for 30 minutes at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. Counter stained with hematoxylin and mounted with DPX.



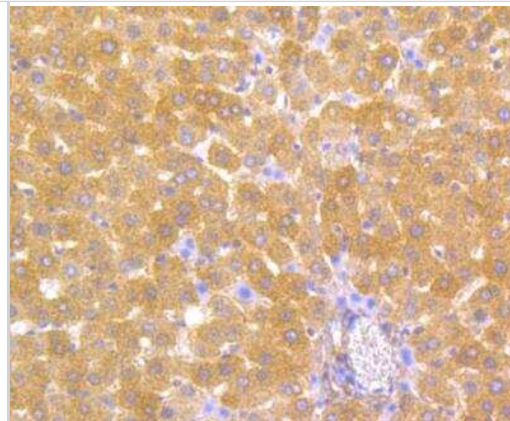
**Western Blot:** Carbonic Anhydrase II/CA2 Antibody (11A1) [NBP2-76974] - Western blot analysis of Carbonic anhydrase 2 on different cell lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody was used at a 1:1,000 dilution in 5% BSA at room temperature for 2 hours. Goat Anti-Mouse IgG - HRP Secondary Antibody at 1:5,000 dilution was used for 1 hour at room temperature. Positive control: Lane 1: THP-1 cell lysate, untreated Lane 2: HL-60 cell lysate, untreated



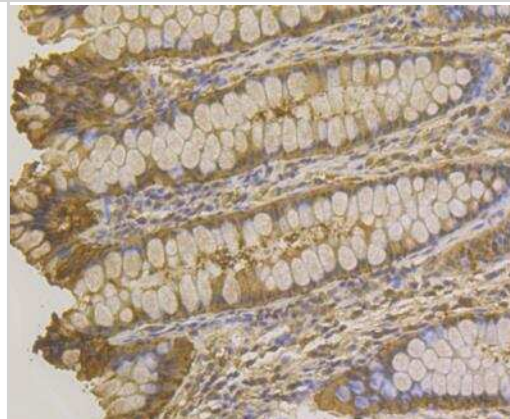
**Immunocytochemistry/Immunofluorescence:** Carbonic Anhydrase II/CA2 Antibody (11A1) [NBP2-76974] - ICC staining Carbonic anhydrase 2 in 293T cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with Carbonic anhydrase 2 monoclonal antibody at a dilution of 1:100 for at least 1 hour at room temperature, washed with PBS. Alexa Fluor 488 Goat anti-Mouse IgG was used as the secondary antibody at 1/100 dilution. The nuclear counter stain is DAPI (blue).



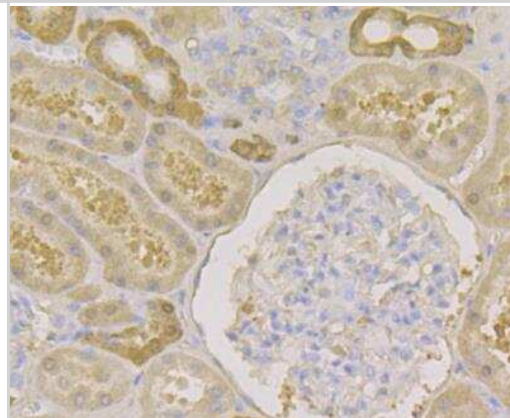
Immunohistochemistry: Carbonic Anhydrase II/CA2 Antibody (11A1) [NBP2-76974] - Immunohistochemical analysis of paraffin-embedded rat liver tissue using anti-Carbonic anhydrase 2 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the antibody at 1/100 dilution, for 30 minutes at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. Counter stained with hematoxylin and mounted with DPX.



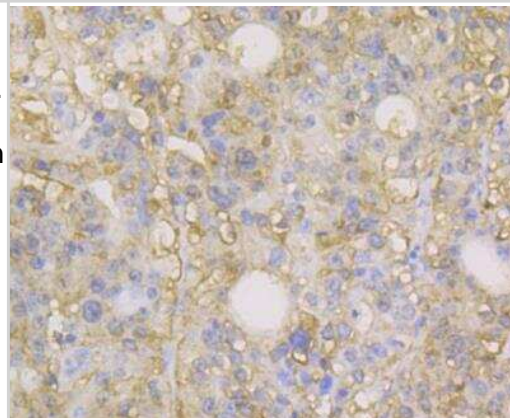
Immunohistochemistry: Carbonic Anhydrase II/CA2 Antibody (11A1) [NBP2-76974] - Immunohistochemical analysis of paraffin-embedded human colon tissue using anti-Carbonic anhydrase 2 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the antibody at 1/100 dilution, for 30 minutes at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. Counter stained with hematoxylin and mounted with DPX.



Immunohistochemistry: Carbonic Anhydrase II/CA2 Antibody (11A1) [NBP2-76974] - Immunohistochemical analysis of paraffin-embedded human colon tissue using anti-Carbonic anhydrase 2 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the antibody at 1/100 dilution, for 30 minutes at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. Counter stained with hematoxylin and mounted with DPX.



Immunohistochemistry: Carbonic Anhydrase II/CA2 Antibody (11A1) [NBP2-76974] - Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue using anti-Carbonic anhydrase 2 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the antibody at 1/100 dilution, for 30 minutes at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. Counter stained with hematoxylin and mounted with DPX.





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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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