Product Datasheet

CD98 Antibody (1C11.7E3) - BSA Free
NBP2-36491

Unit Size: 0.1 mg

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

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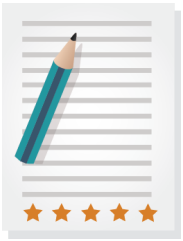


NBP2-36491

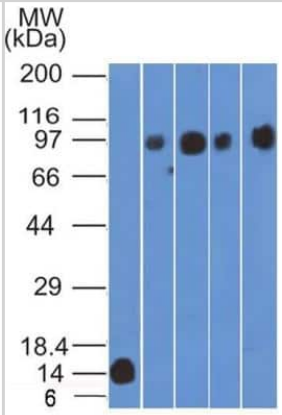
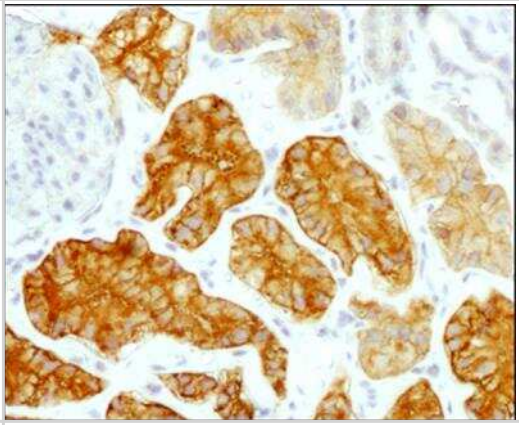
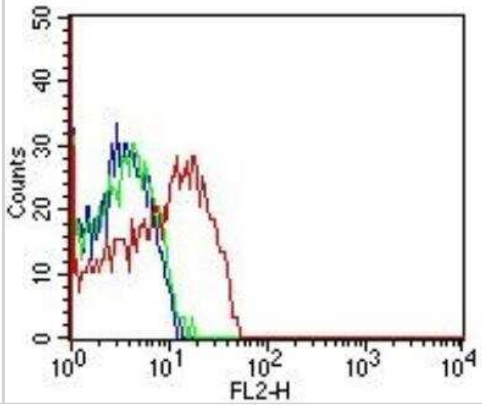
CD98 Antibody (1C11.7E3) - BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	1C11.7E3
Preservative	0.05% Sodium Azide
Isotype	IgG2b Kappa
Purity	Protein G purified
Buffer	PBS

Product Description	
Host	Mouse
Gene ID	6520
Gene Symbol	SLC3A2
Species	Human
Immunogen	Partial recominant human CD98 (between amino acids 200-400) [UniProt P08195]

Product Application Details	
Applications	Western Blot, Flow Cytometry, Flow (Cell Surface), Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 2 ug / ml, Flow Cytometry 2.5 ug / million cells, Immunohistochemistry 1:200 - 1:1000, Immunohistochemistry-Paraffin 1:200 - 1:1000, Flow (Cell Surface)

Images

Western Blot: CD98 Antibody (1C11.7E3) [NBP2-36491] - Western blot analysis of human CD98 in recombinant protein, A431, Jurkat, HeLa and HepG2 lysates at 2.0 ug/ml.	
Immunohistochemistry-Paraffin: CD98 Antibody (1C11.7E3) [NBP2-36491] - IHC analysis of formalin-fixed paraffin-embedded tissue section of human kidney using CD98 antibody (clone 1C11.7E3) at 1:300 dilution. The antibody generated a distinct/intense membranous staining with relatively weaker cytoplasmic signal, and the immunostaining was exclusively observed in tubular epithelial cells with no signal in the Bowman's capsules.	
Flow (Cell Surface): CD98 Antibody (1C11.7E3) [NBP2-36491] - Flow cytometry analysis of human CD98 in hPBMC. Primary antibody was used at 2.5 ug / million cells. Goat anti-mouse IgG (PE) was used at 0.5 ug / million cells. The red shift line represents the primary antibody, the blue line represents the cells alone and the green line represents the isotype control.	

Procedures

Immunohistochemistry-Paraffin protocol for CD98 Antibody (NBP2-36491)

CD98 Antibody (1C11.7E3):

1. Deparaffinize the tissue sections by immersing the slides in Xylene with two changes for 10 min each. Sections should not get dried at any stage from this point.
2. Rehydrate the tissue sections by immersing the slides in decreasing grades of ethanol as follows:
 a. Immerse in 100% ethanol with 2 changes for 5 minutes each
 b. Immerse in 95% ethanol with 2 changes for 5 minutes each
 c. Immerse in 90% ethanol for 5 minutes
 d. Immerse in 70% ethanol for 5 minutes
 e. Immerse in 50% ethanol for 5 minutes
 f. Immerse in distilled water for 5 minutes
3. Antigen Retrieval (Microwave Method):
 a. Immerse the slides in a microwave compatible tray containing 10 mM Sodium Citrate buffer (pH 6.0) with 0.05% Tween 20.
 b. Boil the slides and maintain the sub-boiling temperature for 5 minutes in the microwave. Thereafter, take out the tray very carefully and cool it at room temperature (RT) for about 30 minutes.
 c. Wash the slides 3 times, 3 minutes each by immersing them in TBST (Tris Buffered Saline having 0.05% Tween 20).
4. Quenching of Endogenous Peroxidase:
 a. Incubate the slides in 3% hydrogen peroxide prepared in methanol for 15 minutes (at RT, in dark conditions).
 b. Wash the slides in TBST 3 times, 3 minutes each.
5. Protein Blocking:
 a. Incubate the sections with background sniper solution at RT for 15 minutes (Biocare Medicals, USA).
 b. Wash the sections 3 times, 3 min each by immersing the slides in TBST.
6. Primary Antibody:
 a. Dilute the primary antibody at 5ug/ml concentration using PBS as a diluent.
 b. Incubate the sections with diluted primary antibody for 90 minutes at RT in a humidified chamber.
 c. Thereafter, wash the slides 4 times, 5 minutes each with TBST.
7. Probe (Secondary Reagent):
 a. Incubate with MACH 1 Mouse probe for 15 minutes at RT.
 b. Incubate for 30 min at room temperature with HRP-Polymer (Biocare Medical, USA).
 c. Wash the slides with TBST 4 times, 5 minutes each
8. Chromogen:
 a. Mix 32ul of DAB Chromogen with 1 ml of DAB substrate buffer (Biocare Medical, USA).
 b. Apply 200ul DAB mixture/section and incubate at RT in dark conditions (few seconds - 5 minutes).
 c. As soon as an appropriate color develops, rinse the slides with deionized water (2-3 brief rinses).
9. Counter stain:
 a. Counter stain with Hematoxylin for 30 seconds (Vector Labs, USA).
 b. Wash in deionized water for 1-2 minutes to clear the extra stain.
 c. Incubate the slides in bluing solution or Scott's water twice for 2 minutes each time.
10. Dehydrate the sections in increasing grades of alcohols:
 a. 50% alcohol for 1 minute
 b. 70% for 1 minute
 c. 90% for 1 minute
 d. 95% for 1 minute
 e. 100% for 1 minute
 f. Xylene with 2 changes for 2 minutes each
11. Mount with DPX mount and cover-slip glass (Fisher Scientific, USA), carefully not allowing any air bubbles to enter.

NOTE:- This protocol is provided as a reference tool only. Depending upon the type of tissues /tissue processing and reagents employed, the end user will need to optimize the final conditions for achieving an expected staining.

Western Blot protocol for CD98 Antibody (NBP2-36491)
CD98 Antibody (1C11.7E3):
Reagents needed:
a. Washing Buffer: Tris Buffer Saline with 0.01% of tween 20).
b. Blocking Buffer: 5% skimmed milk powder in washing buffer).
c. Secondary antibody, Horseradish peroxidase conjugated.
d. Chemiluminescent solution (SuperSignal WestPicoTM, Pierce).

Western blot Method:
1. Perform SDS-PAGE using PVDF membrane. Cut into strips.
2. Activate strips with methanol by dipping them into methanol for 5 min.
3. Discard the methanol and take fresh methanol to repeat step b.
4. Let the strips dry, and then add blocking solution and incubate at RT in a shaker for 30-45 minutes.
5. Dilute primary antibody in blocking buffer. Incubate the number of strips required with the diluted primary antibody at room temperature for 2 hours in a shaker.
6. Wash strips two times with washing buffer at 30 minutes intervals.
7. Dilute HRP conjugated secondary antibody in blocking buffer. Add diluted secondary antibody to the membrane strips and incubate for exactly 1 hour while shaking at RT.
8. Wash the strips with washing buffer for 2-3 hours with 3 to 4 changes on a shaker. This helps in reducing the back ground staining.
9. Prepare the chemiluminescent solution (SuperSignal WestPicoTM) by mixing solution A and Solution B at 1:1. Mix well. Soak the strip in the chemiluminescent solution; keep for 3-5 minutes under constant shaking.
10. Expose the membrane to a sheet of film and develop.

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Products Related to NBP2-36491

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-43317-0.5mg	Mouse IgG2b Kappa Light Chain Isotype Control (MG2b)
NBP2-36491APC	CD98 Antibody (1C11.7E3) [Allophycocyanin]

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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