Product Datasheet

CD44 Antibody (EPR1013Y)
NB110-55700

Unit Size: 0.1 ml

Store at -20C. Avoid freeze-thaw cycles.

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Publications: 2

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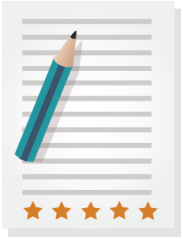
Updated 9/5/2019 v.20.1



NB110-55700

CD44 Antibody (EPR1013Y)

Product Information

Unit Size	0.1 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	EPR1013Y
Preservative	0.01% Sodium Azide
Isotype	IgG
Purity	Tissue culture supernatant
Buffer	49% PBS, 0.05% BSA and 50% Glycerol
Target Molecular Weight	82 kDa

Product Description

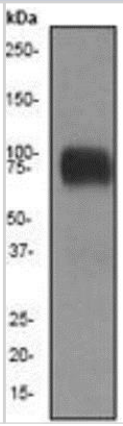
Host	Rabbit
Gene ID	960
Gene Symbol	CD44
Species	Human, Mouse
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 24518045)
Marker	Cell Membrane Marker
Immunogen	A synthetic peptide corresponding to residues in human CD-44 was used as an immunogen.
Notes	Produced using Abcam's RabMab® technology. RabMab® technology is covered by the following U.S. Patents, No. 5,675,063 and/or 7,429,487.

Product Application Details

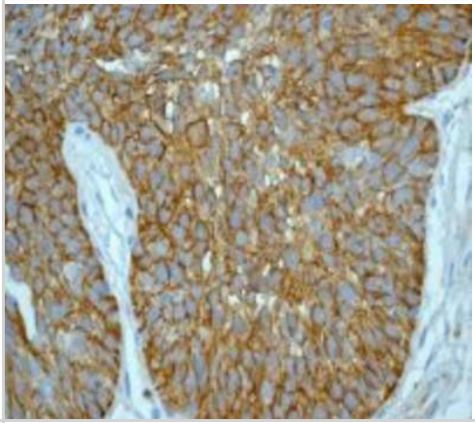
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:1000-10000, Flow Cytometry 1:30, Immunohistochemistry 1:50-1:100, Immunocytochemistry/Immunofluorescence 1:100-1:250, Immunohistochemistry-Paraffin 1:50-1:100
Application Notes	In Western blot this antibody detects a band at approximately 85-90 kDa.

Images

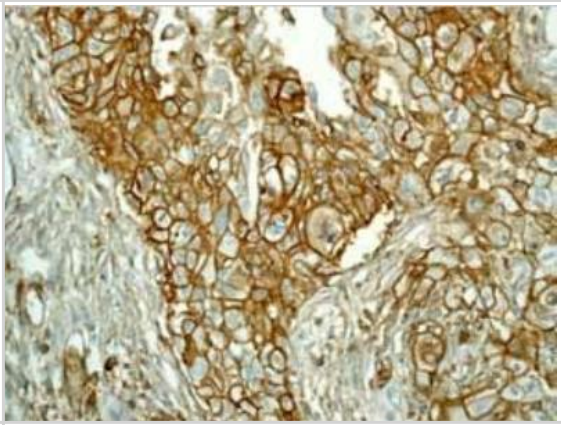
Western Blot: CD44 Antibody (EPR1013Y) [NB110-55700] - TF-1 cell lysate using a 1:5000 dilution.



Immunohistochemistry: CD44 Antibody (EPR1013Y) [NB110-55700] - Staining of paraffin-embedded human urinary bladder using anti-CD-44

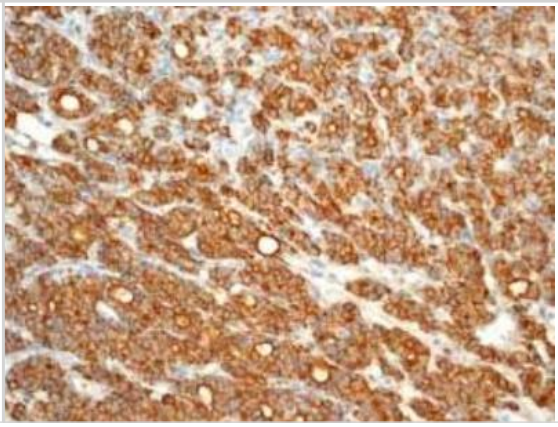


Immunohistochemistry-Paraffin: CD44 Antibody (EPR1013Y) [NB110-55700] - Staining in human Breast carcinoma tissue.

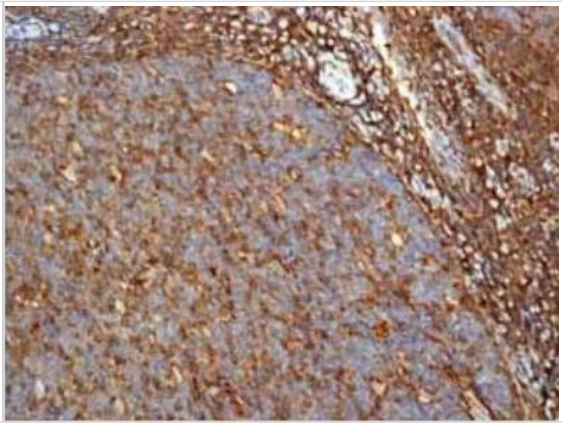


Immunohistochemistry-Paraffin: CD44 Antibody (EPR1013Y) [NB110-55700] - Staining in human Glioma tissue.

Immunohistochemistry-Paraffin: CD44 Antibody (EPR1013Y) [NB110-55700] - Staining in human Thyroid gland carcinoma tissue.



Immunohistochemistry-Paraffin: CD44 Antibody (EPR1013Y) [NB110-55700] - Staining in Normal human tonsil tissue.



Publications

Pinto MP, Badtke MM, Dudevoir ML et al. Vascular endothelial growth factor secreted by activated stroma enhances angiogenesis and hormone-independent growth of estrogen receptor-positive breast cancer. Cancer Res 2010 Apr [PMID: 20332242]

Horwitz KB, Dye WW, Harrell JC et al. Rare steroid receptor-negative basal-like tumorigenic cells in luminal subtype human breast cancer xenografts. Proc Natl Acad Sci U S A 2008 Apr [PMID: 18391223] (IHC)

Procedures

Immunohistochemistry Protocol for CD44 Antibody (NB110-55700)
Immunohistochemistry Protocol for Paraffin-embedded Tissues

1. Solutions and reagents
1.1. Xylene
1.2. Ethanol, anhydrous denatured, histological grade (100%, 95%, 70%)
1.3. Washing buffer:
TBST washing buffer: 1XTBS/0.1% Tween-20
To prepare stock solution of 10X TBS: add 24.2 g Trizma base and 80 g sodium chloride to 1L of dH2O. Adjust pH to 7.6.
Working solution. 1XTBST/0.1% Tween-20: add 100ml 10XTBS to 900 ml dH2O. Add 1 ml Tween-20 and mix well.
1.4. Distilled water (dH2O)
1.5. Antigen Retrieval Solution:
0.01M Sodium Citrate Buffer, pH 6.0
To prepare stock solutions:
Solution A. 0.1 M citric acid solution: dissolve 21.0 g of citric acid, monohydrate (C6H8O7.H2O) in 1 liter of dH2O.
Solution B. 0.1M sodium citrate solution: dissolve 29.4 g trisodium citrate dihydrate (C6H5Na3O7.2H2O) in 1 liter of dH2O.
Working solution: Add 9 ml of Stock solution A and 41 ml of stock solution B to 450 ml of dH2O. Adjust pH to 6.0.
1.6. 3% Hydrogene Peroxide
1.7. Blocking buffer:
PBS (Dulbeccos Phosphate Buffered Salts, 1X, catalog #21-031-CV from Mediatech, Inc.) + 10% serum (serum origin depends on the host of the secondary antibody)
1.8. Hematoxylin QS (catalog #H-3404 from Vector Laboratories, Inc.)
1.9. Permanent Mounting medium (VectaMount, catalog# H-5000 Vector Laboratories, Inc.)

2. Protocol

2.1. Deparaffinization/Rehydration
2.1.1. Heat slides in an oven at 65C for 1 hour.
2.1.2. De-paraffinize/hydrate using the following series of washes: two Xylene washes (5 min each), followed by two 100% ethanol rinses (5 min each), followed by 95% ethanol, 70% ethanol, 50% ethanol, 30% ethanol, followed by H2O and a TBST wash for 5 min on a shaker.
2.2. Antigen Retrieval
2.2.1. Immerse slides into staining dish containing Antigen Retrieval Solution.
2.2.2. Place covered staining dish into the rice cooker. Add 120 ml of dH2O.
2.2.3. When cook is turned to warm (about 20 to 30 min), unplug the cooker and remove the staining dish to the bench top.
2.2.4. Allow to cool down, without cover, for 20 min.
2.3. Staining
2.3.1. Wash slides with TBST for 5 min on a shaker.
2.3.2. Inactivate endogenous peroxidase by covering tissue with 3% hydrogen peroxide for 10 min.
2.3.3. Wash slides three times with TBST (3 min each on a shaker).
2.3.4. Block slides with the blocking solution for 1 hour.
2.3.5. Dilute primary antibody in the blocking buffer per recommendation on the data sheet.
2.3.6. Apply primary antibody to each section and incubate overnight in the humidified chamber (4C).
2.3.7. Wash slides three times with TBST (3 min each on a shaker).
2.3.8. Apply to each section secondary HRP-conjugated anti-rabbit antibody diluted in the blocking solution per manufacturers recommendation; incubate for 1 hour at room temperature.
2.3.9. Wash slides three times with TBST (3 min each on a shaker).
2.3.10. Add freshly prepared DAB substrate to the sections.
2.3.11. Incubate tissue sections with the substrate at room temperature until suitable staining develops (generally 2 to 5 min).
2.3.12. Rinse sections with water.
2.3.13. Counterstain with Hematoxylin.
2.3.14. Rinse sections with water.
2.3.15. Dehydrate samples using two rinses with 100% Ethanol (20 dips per rinse) followed by two rinses with Xylene (30 dips per rinse).
2.3.16. Mount coverslips on slides using Permount medium.

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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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