Product Datasheet

E-Cadherin Antibody (EP700Y)
NB110-56937

Unit Size: 0.1 ml

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

www.novusbio.com technical@novusbio.com

Reviews: 1 Publications: 17

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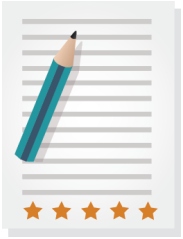
Updated 12/20/2023 v.20.1



NB110-56937

E-Cadherin Antibody (EP700Y)

Product Information	
Unit Size	0.1 ml
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	EP700Y
Preservative	No Preservative
Isotype	IgG
Purity	Protein A or G purified
Buffer	Culture supernatant in buffered aqueous solution

Product Description	
Host	Rabbit
Gene ID	999
Gene Symbol	CDH1
Species	Human
Marker	Epithelial Cell Marker, Adherens Junctions Marker
Immunogen	A synthetic peptide corresponding to residues in the 5th cadherin domain of human E-cadherin was used.

Product Application Details	
Applications	Western Blot, Simple Western, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation
Recommended Dilutions	Western Blot 1: 1000-10000, Simple Western 1:200, Immunohistochemistry 1:10 -1:500, Immunocytochemistry/ Immunofluorescence 1:500, Immunoprecipitation 1:50, Immunohistochemistry-Paraffin 1:500
Application Notes	In Western blot this antibody detects a band at approximately 135 kDa. This is a high affinity, high titer antibody. Optimal dilutions should be determined by the end user. (Provided dilutions serve only as a suggestive starting point.). In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. Separated by Size-Wes, Sally Sue/Peggy Sue.

Publications

Li J, Luco AL, Camirand A et al. Vitamin D regulates CXCL12/CXCR4 and epithelial-to-mesenchymal transition in a model of breast cancer metastasis to lung Endocrinology 2021-03-09 [PMID: 33693593] (ICC/IF, Mouse)

Supp DM, Hahn JM, Combs KA et al. Collagen VII Expression is Required in Both Keratinocytes and Fibroblasts for Anchoring Fibril Formation in Bilayer Engineered Skin Substitutes Cell Transplant 2019-07-04 [PMID: 31271052] (IHC-Fr, Mouse)

Bu D, Crewe C, Kusminski CM et al. Human endotrophin as a driver of malignant tumor growth JCI Insight 2019-03-21 [PMID: 30896449] (IF/IHC, Human)

Hahn J. M, Combs K. A, et al. Identification of Merkel cells associated with neurons in engineered skin substitutes after grafting to full thickness wounds. PLoS One 2019-03-06 [PMID: 30835771] (ICC/IF, Human)

Uribe D, Cardona A, Degli Esposti D, Cros MP. Antiproliferative Effects of Epigenetic Modifier Drugs through E-cadherin Up-regulation in Liver Cancer Cell Lines. gene 1905-07-10 [PMID: 29735783] (ICC/IF)

Green CJ, Fraser ST, Day ML. Insulin-like growth factor 1 increases apical fibronectin in blastocysts to increase blastocyst attachment to endometrial epithelial cells in vitro. Hum. Reprod. 2015-02-01 [PMID: 25432925] (WB, Human)

Details:
Fibronectin/Anastellin antibody used for ICC-IF on Day 5 blastocysts that were cultured in serum starved medium for 24 , 48 or 72 h in the absence or presence of IGF1 or in the presence of a PI3K inhibitor LY294002 or in the presence of IGF1, attached to a coverslip - 15 minute 4% paraformaldehyde fixation, 30 minutes permeablization with PBS-Polyvinyl alcohol-0.3% Triton X100, blocking in PPTB (PBS + PVA + 0.1% Tween-20 + 0.7% BSA), ON 4C incubation of primary, anti-rabbit Alexa 488 secondary antibody (Figure 5).

Raghunathan VK, Dreier B, Morgan JT et al. Involvement of YAP, TAZ and HSP90 in Contact Guidance and Intercellular Junction Formation in Corneal Epithelial Cells. PLoS One. 2014-10-07 [PMID: 25290150] (ICC/IF, Human)

Akat K, Bleck CK, Lee YM et al. Characterization of a novel type of adherens junction in meningiomas and the derived cell line HBL-52. Cell Tissue Res 2008-02-01 [PMID: 17965884] (ICC/IF, IP)

Huang C, Du R, Zhang P et al. Expression, purification, and functional characterization of recombinant PTD-SARA. Acta Biochim Biophys Sin (Shanghai) 2011-02-01 [PMID: 21266541] (ICC/IF)

Fanjul M, Gmyr V, Sengenss C et al. Evidence for epithelial-mesenchymal transition in adult human pancreatic exocrine cells. J Histochem Cytochem 2010-09-01 [PMID: 20530463] (ICC/IF)

Tarantal AF, Chen H, Shi TT et al. Overexpression of transforming growth factor-beta1 in fetal monkey lung results in prenatal pulmonary fibrosis. Eur Respir J 2010-10-01 [PMID: 20351039] (ICC/IF)

Walter B, Krebs U, Berger I et al. Protein p0071, an armadillo plaque protein of adherens junctions, is predominantly expressed in distal renal tubules. Histochem Cell Biol 2010-01-01 [PMID: 19830446] (ICC/IF)

More publications at http://www.novusbio.com/NB110-56937

Procedures

Immunohistochemistry protocol for E-Cadherin Antibody (NB110-56937)
Immunohistochemistry Protocol for E-Cadherin Antibody (NB110-56937):
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.

Novus Biologicals USA
10730 E. Briarwood Avenue
Centennial, CO 80112
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
nb-customerservice@bio-techne.com

Bio-Techne Canada
21 Canmotor Ave
Toronto, ON M8Z 4E6
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada.inquires@bio-techne.com

Bio-Techne Ltd
19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info.EMEA@bio-techne.com

General Contact Information
www.novusbio.com
Technical Support: nb-technical@bio-techne.com
Orders: nb-customerservice@bio-techne.com
General: novus@novusbio.com

Limitations
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