Anti-N Cadherin Antibody [SY02-46]

ET1607-37

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Cynomolgus monkey, Pig
Applications:	WB, IHC-P, IHC-Fr, IF-Tissue
Molecular Wt:	Predicted band size: 100 kDa
Clone number:	SY02-46

Description: Cadherins comprise a family of Ca2+-dependent adhesion molecules that function to mediate cell-cell binding critical to the maintenance of tissue structure and morphogenesis. The classical cadherins, E-, N- and P-cadherin, consist of large extracellular domains characterized by a series of five homologous NH2 terminal repeats. The most distal of these cadherins is thought to be responsible for binding specificity, transmembrane domains and carboxy-terminal intracellular domains. The relatively short intracellular domains interact with a variety of cytoplasmic proteins, such as b-catenin, to regulate cadherin function. Members of this family of adhesion proteins include rat cadherin K (and its human homolog, cadherin-6), R-cadherin, B-cadherin, E/P cadherin and cadherin-5.

Immunogen: Synthetic peptide within Human N Cadherin aa 161-210 / 906.

Positive control: 293T cell lysate, A549 cell lysate, HeLa cell lysate, A-172 cell lysate, MCF7 cell lysate, C2C12 cell lysate, C6 cell lysate, mouse liver tissue, rat liver tissue, human liver carcinoma tissue, human liver tissue, mouse heart tissue, Hela.

Subcellular location: Cell membrane.

Database links: SwissProt: P19022 Human | P15116 Mouse | Q9Z1Y3 Rat

Recommended Dilutions:

WB	1:5,000-1:20,000
IHC-P	1:10,000-1:40,000
IHC-Fr	1:500-1:1,000
IF-Tissue	1:2,000

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

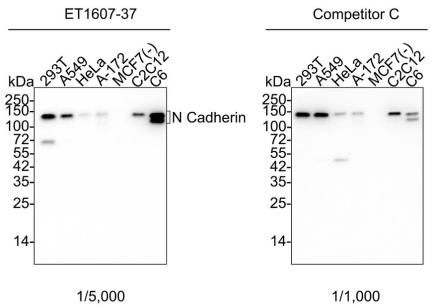

Fig1: Western blot analysis of N Cadherin on different lysates with Rabbit anti-N Cadherin antibody (ET1607-37) at 1/5,000 dilution and competitor's antibody at 1/1,000 dilution.

Lane 1: 293T cell lysate
Lane 2: A549 cell lysate
Lane 3: HeLa cell lysate
Lane 4: A-172 cell lysate
Lane 5: MCF7 cell lysate (negative)
Lane 6: C2C12 cell lysate
Lane 7: C6 cell lysate

Lysates/proteins at 15 µg/Lane.

Predicted band size: 100 kDa
Observed band size: 140-150 kDa

Exposure time: 2 minutes 6 seconds; ECL: K1801;
4-20% 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 (ET1607-37) at 1/5,000 dilution and competitor's antibody at 1/1,000 dilution were used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

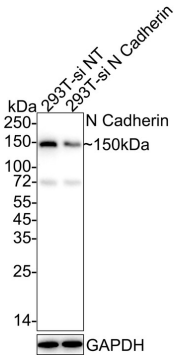

Fig2: Western blot analysis of N Cadherin on different lysates with Rabbit anti-N Cadherin antibody (ET1607-37) at 1/5,000 dilution.

Lane 1: 293T-si NT cell lysate (10 µg/Lane)
Lane 2: 293T-si N Cadherin cell lysate (10 µg/Lane)

Predicted band size: 100 kDa
Observed band size: 150 kDa

Exposure time: 1 minute 46 seconds; ECL: K1801;
4-20% 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 (ET1607-37) at 1/5,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

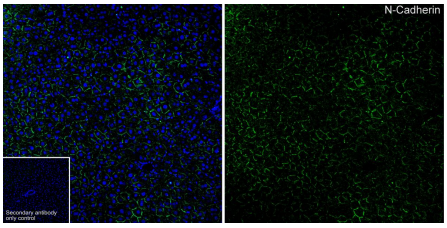

Fig3: Application: IHC-Fr

Species: Mouse

Site: Liver

Sample: Frozen section

Antibody concentration: 1:500

Antigen retrieval: Recommend. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for about 2 minutes in microwave oven.

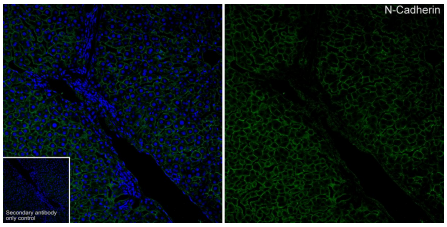

Fig4: Application: IHC-Fr

Species: Mouse

Site: Liver

Sample: Frozen section

Antibody concentration: 1:500

Antigen retrieval: Recommend. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for about 2 minutes in microwave oven.

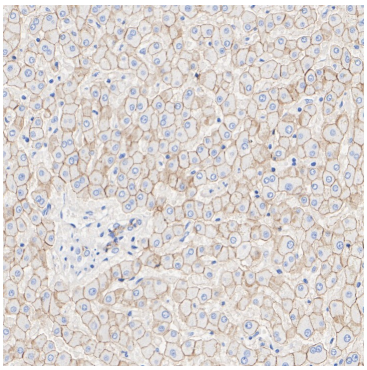

Fig5: Immunohistochemical analysis of paraffin-embedded human liver tissue with Rabbit anti-N Cadherin antibody (ET1607-37) at 1/40,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1607-37) at 1/40,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

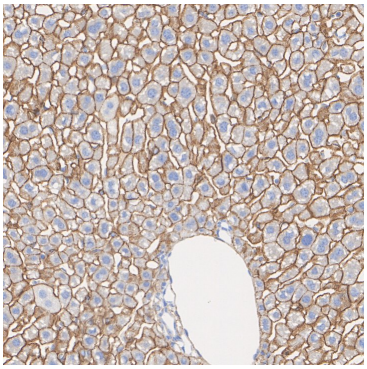

Fig6: Immunohistochemical analysis of paraffin-embedded mouse liver tissue with Rabbit anti-N Cadherin antibody (ET1607-37) at 1/40,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1607-37) at 1/40,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

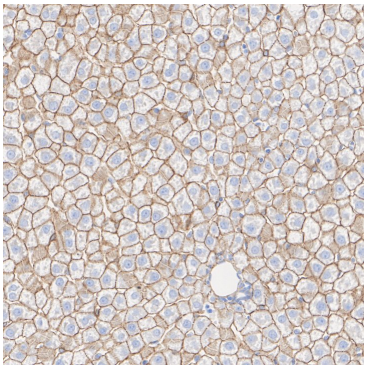

Fig7: Immunohistochemical analysis of paraffin-embedded rat liver tissue with Rabbit anti-N Cadherin antibody (ET1607-37) at 1/40,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1607-37) at 1/40,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

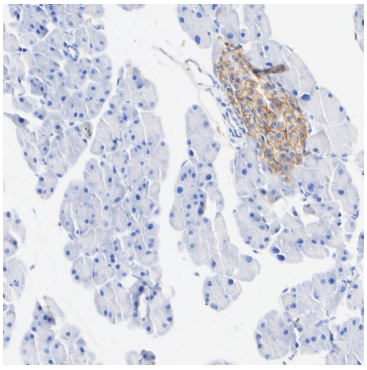

Fig8: Immunohistochemical analysis of paraffin-embedded mouse pancreas tissue with Rabbit anti-N Cadherin antibody (ET1607-37) at 1/40,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1607-37) at 1/40,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

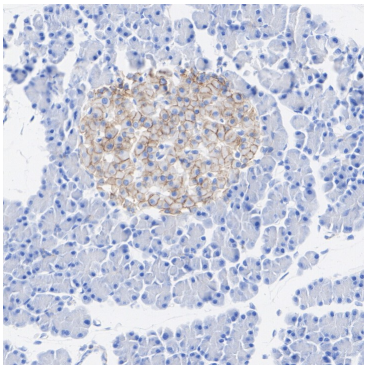

Fig9: Immunohistochemical analysis of paraffin-embedded rat pancreas tissue with Rabbit anti-N Cadherin antibody (ET1607-37) at 1/40,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1607-37) at 1/40,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. You A et al. Metformin sensitizes sorafenib to inhibit postoperative recurrence and metastasis of hepatocellular carcinoma in orthotopic mouse models. J Hematol Oncol 9:20 (2016).
2. Fischer KD et al. Vitamin D Supplementation Reduces Induction of Epithelial-Mesenchymal Transition in Allergen Sensitized and Challenged Mice. PLoS One 11:e0149180 (2016).