Product Datasheet

beta-Catenin Antibody (12F7)
NBP1-54467SS

Unit Size: 0.025 ml

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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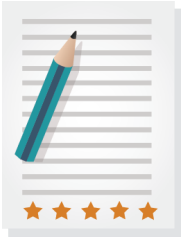
Updated 8/18/2016 v.20.1



NBP1-54467SS

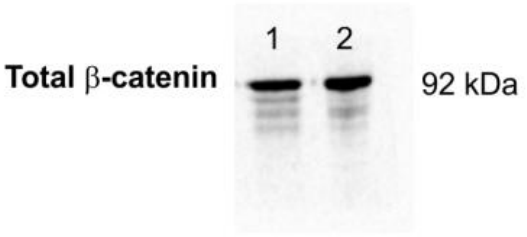
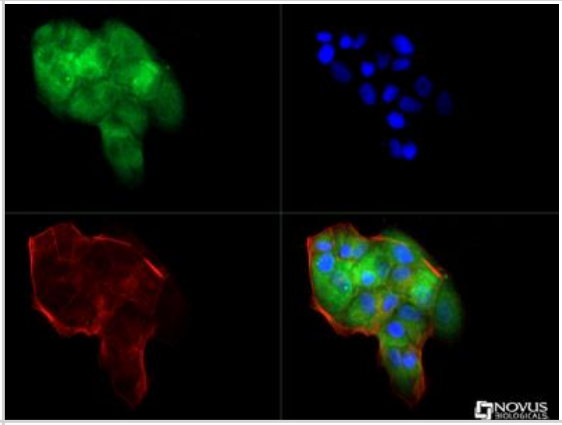
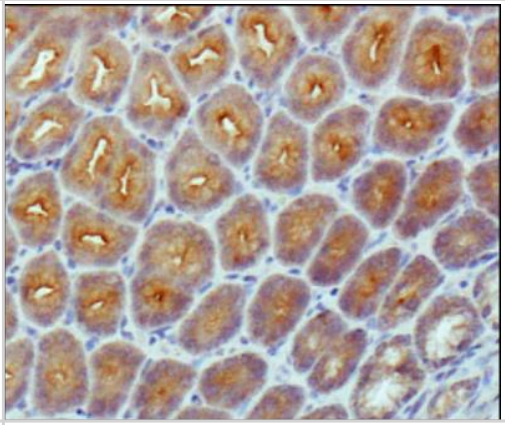
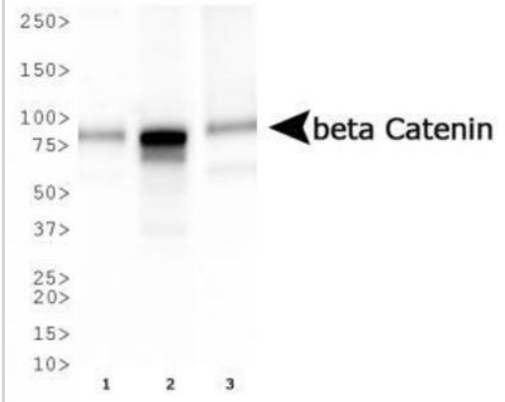
beta-Catenin Antibody (12F7)

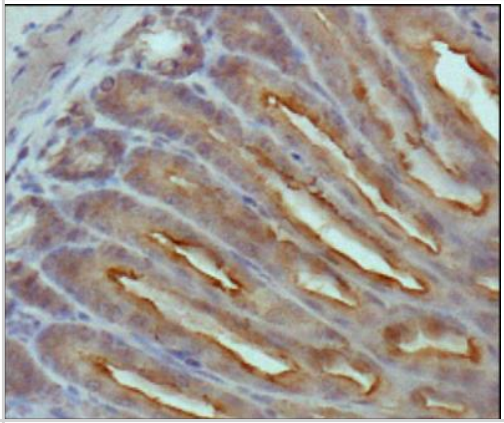
Product Information	
Unit Size	0.025 ml
Concentration	1.0 mg/ml
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	12F7
Preservative	0.02% Sodium Azide
Isotype	IgG1
Purity	Protein G purified
Buffer	PBS
Target Molecular Weight	92 kDa

Product Description	
Host	Mouse
Gene ID	1499
Gene Symbol	CTNNB1
Species	Human, Mouse, Rat, Chicken, Primate
Reactivity Notes	Human, mouse, rat, monkey and chicken.
Marker	Epithelial Cell Marker, Adherens Junction Marker
Immunogen	Recombinant chicken beta Catenin fused to maltose binding protein. [UniProt# O42486]

Product Application Details	
Applications	Western Blot, Simple Western, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation
Recommended Dilutions	Western Blot 1:1000, Simple Western 1:100, Immunohistochemistry 1:100-1:200, Immunocytochemistry/Immunofluorescence 1:50-1:100, Immunoprecipitation 1:10-1:500, Immunohistochemistry-Paraffin 1:100-1:200
Application Notes	This beta Catenin (12F7) antibody is useful for Immunohistochemistry on paraffin embedded sections, Immunocytochemistry/Immunofluorescence, Immunoprecipitation and Western blot, where a band can be seen at ~ 92 kDa.In Simple Western only 10-15 uL of the recommended dilution is used per data point. The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.

Images

Western Blot: beta-Catenin Antibody (12F7) [NBP1-54467] - analysis of beta- Catenin in embryonic lung (lane 1) and embryonic limb (lane 2) lysates using anti-beta- Catenin antibody. Each lane was loaded with 5ug of protein sample. Image from verified customer review.	
Immunocytochemistry/Immunofluorescence: beta-Catenin Antibody (12F7) [NBP1-54467] - The beta- Catenin antibody was tested in MCF-7 cells against Dylight 488 (Green). Actin and nuclei were counterstained against Phalloidin 550 (Red) and DAPI (Blue).	
Immunohistochemistry-Paraffin: beta-Catenin Antibody (12F7) [NBP1-54467] - IHC analysis of beta- Catenin in mouse intestine using DAB with hematoxylin counterstain.	
Western Blot: beta-Catenin Antibody (12F7) [NBP1-54467] - Western blot analysis of beta Catenin expression in 1) HepG2, 2) MCF7, and 3) Cos7 whole cell lysates using NBP1-54467.	

Immunohistochemistry-Paraffin: beta-Catenin Antibody (12F7) [NBP1-54467] - IHC analysis of beta Catenin in mouse intestine using DAB with hematoxylin counterstain.	
Simple Western: beta-Catenin Antibody (12F7) [NBP1-54467] - Simple Western lane view shows a specific band for Beta- Catenin in 0.5 mg/ml of HepG2 lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.	

Publications

Wu JH, Liu JH, Ko YC et al. Haploinsufficiency of RCBTB1 is associated with Coats disease and familial exudative vitreoretinopathy Hum. Mol. Genet. Feb 11 2016 12:00AM [PMID: 26908610] (WB, ICC/IF, Human)

Moura Rute Silva, Carvalho-Correia Eduarda, daMota Paulo, Correia-Pinto Jorge. Canonical Wnt signaling activity in early stages of chick lung development. PLoS One. 2014 Dec 02 [PMID: 25460002] (WB, Chicken)

Nieset JE, Redfield AR, Jin F, Knudsen KA, Johnson KR, Wheelock MJ. Characterization of the interactions of alpha-catenin with alpha-actinin and beta-catenin/plakoglobin. J Cell Sci;110 (Pt 8):1013-22. 1997 Apr. [PMID: 9152027] (WB, ICC/IF, Human)

Islam S, Carey TE, Wolf GT, Wheelock MJ, Johnson KR. Expression of N-cadherin by human squamous carcinoma cells induces a scattered fibroblastic phenotype with disrupted cell-cell adhesion. J Cell Biol;135(6 Pt 1):1643-54. 1996 Dec. [PMID: 8978829] (WB, Human)

Knudsen KA, Soler AP, Johnson KR, Wheelock MJ. Interaction of alpha-actinin with the cadherin/catenin cell-cell adhesion complex via alpha-catenin. J Cell Biol;130(1):67-77. 1995 Jul. [PMID: 7790378] (WB, IP, ICC/IF, Human)

Sacco PA, McGranahan TM, Wheelock MJ, Johnson KR. Identification of plakoglobin domains required for association with N-cadherin and alpha-catenin. J Biol Chem;270(34):20201-6. 1995 Aug 25. [PMID: 7650039] (WB, Human)

Procedures

Western Blot Protocol Specific for NBP1-54467 (NBP1-54467)
Western Blot Protocol
1. Perform SDS-PAGE on samples to be analyzed, loading 40 ug of total protein per lane.
2. Transfer proteins to membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain according to standard Ponceau S procedure (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot.
5. Block the membrane using standard blocking buffer for at least 1 hour.
6. Wash the membrane in wash buffer three times for 10 minutes each.
7. Dilute primary antibody in blocking buffer and incubate 1 hour at room temperature.
8. Wash the membrane in wash buffer three times for 10 minutes each.
9. Apply the diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
10. Wash the blot in wash buffer three times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions.
Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05 -0.2%.

*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.

Immunohistochemistry-Paraffin Protocol Specific for NBP1-54467 (NBP1-54467)
Immunohistochemistry-Paraffin Embedded Sections

Antigen Unmasking:
Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes.

Staining:
1. Wash sections in deionized water three times for 5 minutes each.
2. Wash sections in wash buffer for 5 minutes.
3. Block each section with 100-400 ul blocking solution for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4 C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul biotinylated diluted secondary antibody. Incubate 30 minutes at room temperature.
7. Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.
8. Add 100-400 ul Streptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.
9. Wash sections three times in wash buffer for 5 minutes each.
10. Add 100-400 ul DAB substrate to each section and monitor staining closely.
11. As soon as the sections develop, immerse slides in deionized water.
12. Counterstain sections in hematoxylin.
13. Wash sections in deionized water two times for 5 minutes each.
14. Dehydrate sections.
15. Mount coverslips.

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Immunocytochemistry/Immunofluorescence Protocol for beta Catenin Antibody (NBP1-54467)
Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 30 minutes.
2. Remove the formalin and add ice cold methanol. Incubate for 5-10 minutes.
3. Remove methanol and add washing solution (i.e. PBS). Be sure to not let the specimen dry out. Wash three times for 10 minutes.
4. To block nonspecific antibody binding incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
5. Add primary antibody at appropriate dilution and incubate at room temperature from 2 hours to overnight at room temperature.
6. Remove primary antibody and replace with washing solution. Wash three times for 10 minutes.
7. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
8. Remove antibody and replace with wash solution, then wash for 10 minutes. Add Hoechst 33258 to wash solution at 1:25,0000 and incubate for 10 minutes. Wash a third time for 10 minutes.
9. Cells can be viewed directly after washing. The plates can also be stored in PBS containing Azide covered in Parafilm (TM). Cells can also be cover-slipped using Fluoromount, with appropriate sealing.

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