Product Datasheet

NT5C Antibody - BSA Free
NBP1-84563

Unit Size: 0.1 ml

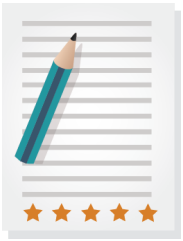
Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

www.novusbio.com technical@novusbio.com

Publications: 1

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NBP1-84563

Updated 4/13/2025 v.20.1



NBP1-84563

NT5C Antibody - BSA Free

Product Information

Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS (pH 7.2) and 40% Glycerol

Product Description

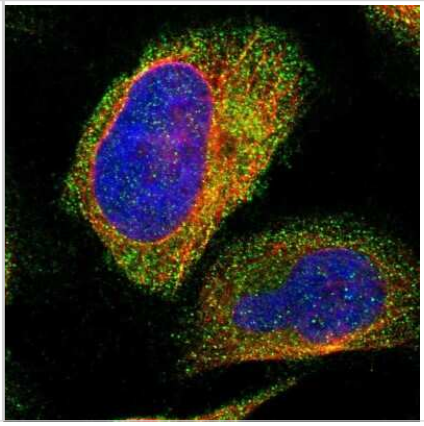
Host	Rabbit
Gene ID	30833
Gene Symbol	NT5C
Species	Human
Reactivity Notes	Immunogen displays the following percentage of sequence identity for non-tested species: Mouse (89%)
Immunogen	This antibody was developed against Recombinant Protein corresponding to amino acids: VLADFEAGLLRGFRRRFPEEPHVPLEQRRGFLAREQYRALRPDLADKVASVYE APGFFLDLEPIP

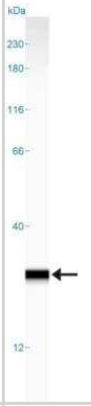
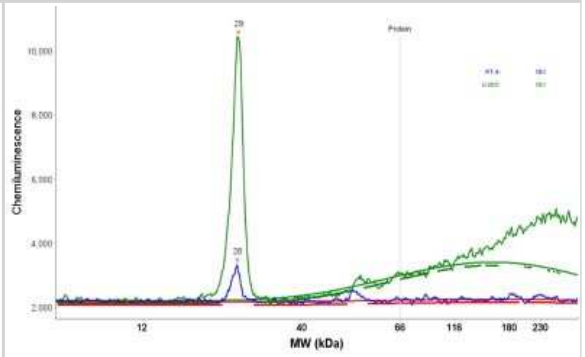
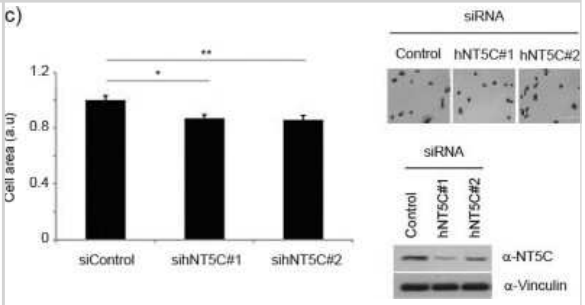
Product Application Details

Applications	Western Blot, Simple Western, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Knockdown Validated
Recommended Dilutions	Western Blot Reported in the literature (PMID:28059163)., Simple Western 1:20, Immunohistochemistry 1:200 - 1:500, Immunocytochemistry/ Immunofluorescence 0.25-2 ug/ml, Immunohistochemistry-Paraffin 1:200 - 1:500, Knockdown Validated
Application Notes	ICC/IF Fixation Permeabilization: Use PFA/Triton X-100. IHC-Paraffin HIER pH6 retrieval is recommended.

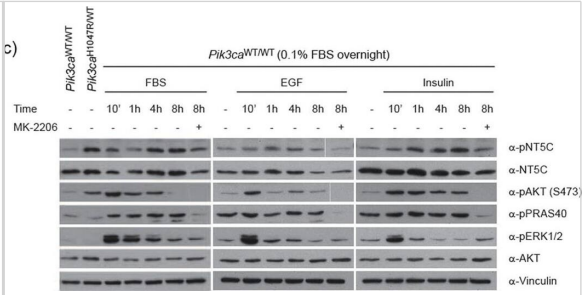
Images

Immunocytochemistry/Immunofluorescence: NT5C Antibody [NBP1-84563] - Staining of human cell line U-2 OS shows localization to cytosol. Antibody staining is shown in green.

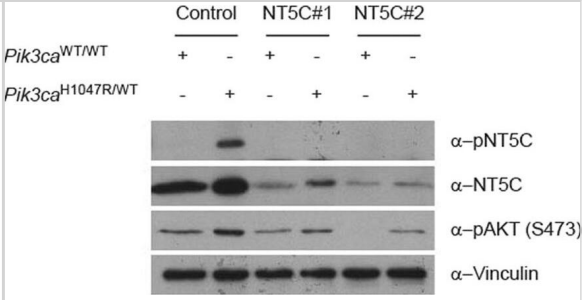


Simple Western: NT5C Antibody [NBP1-84563] - Simple Western lane view shows a specific band for NT5C in 0.2 mg/ml of RT-4 lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.	
Simple Western: NT5C Antibody [NBP1-84563] - Simple Western lane view shows a specific band for NT5C in 0.2 mg/ml of U-2OS lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.	
Simple Western: NT5C Antibody [NBP1-84563] - Electropherogram image(s) of corresponding Simple Western lane view. NT5C antibody was used at 1:20 dilution on U-2OS lysates(s).	
NT5C-Antibody-Knockdown-Validated-NBP1-84563-img0012.jpg	

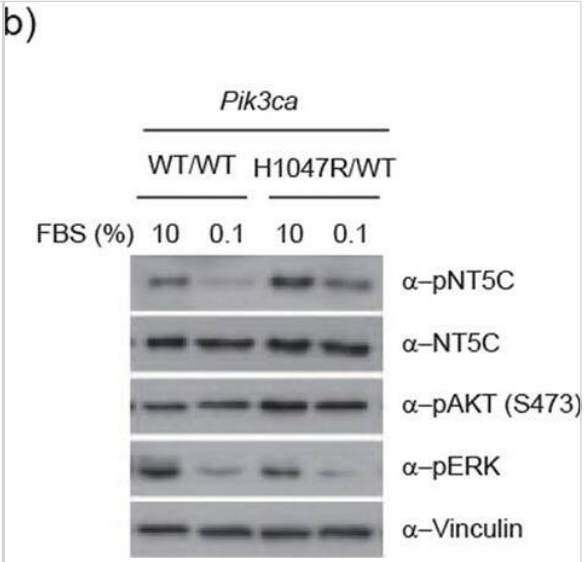
Western Blot: NT5C Antibody [NBP1-84563] - Regulation of NT5C S184 phosphorylation.(a) Sensitivity of S184 phosphorylation to PI3K pathway inhibitors. Primary MEFs were treated with A66 (3 μM), MK-2206 (1 μM), Rapamycin (20 nM), U0126 (10 μM) or DMSO as control for 3 h or overnight (o/n) for 16–18 h before lysis. (left) Lysates were immunoblotted as indicated. (right) Quantification of 4 independent experiments. Values are expressed relative to DMSO treated Pik3caH1047R/WT cells. Error bars are sem, **p < 0.01. (b) Sensitivity of S184 phosphorylation to growth factor deprivation. Indicated primary MEFs were grown in 10% FBS or starved overnight in 0.1% FBS. (top) Lysates were immunoblotted as indicated. (bottom) Quantification of 5 independent experiments. Values are expressed relative to Pik3caH1047R/WT cells grown in 10% FBS. Error bars are sem, ***p < 0.001. (c) Sensitivity of S184 phosphorylation to growth factor stimulation. Primary MEFs were starved overnight in 0.1% FBS & stimulated with FBS (10%), Insulin (100 nM) or EGF (100 ng/ml) for the indicated times before lysis. DMSO or MK-2206 (1 μM) was added at same time as stimuli. (top) Lysates were immunoblotted as indicated. (bottom) Quantification of 3–5 independent experiments. Values are expressed relative to time 0 for each stimuli. Error bars are sem. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/28059163), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



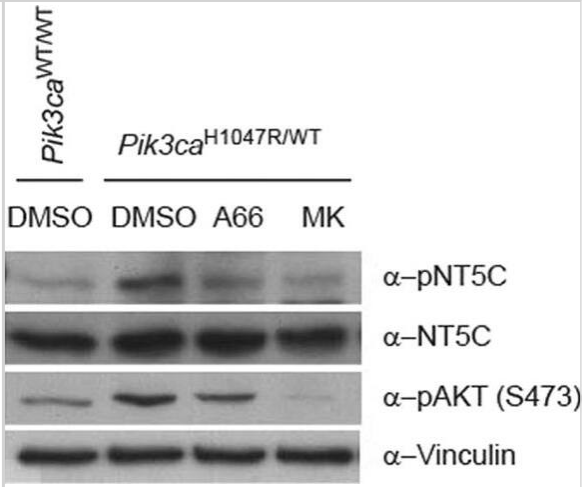
Western Blot: NT5C Antibody [NBP1-84563] - Impact of S184 phosphorylation of NT5C catalytic activity.(a) S184 phosphorylation does not regulate NT5C nucleotidase activity in vitro. (left) Immunoprecipitates of Flag-NT5C ectopically expressed in HEK293 cells were incubated with 5 mM of the indicated nucleotides. Phosphate release was measured using a malachite green colorimetric assay & expressed as a percent of total nucleotide. The experiment was performed in duplicate & repeated 3 times independently. Error bars are sem. (right) Representative immunoblot from experimental cells. (b) Cells expressing Pik3caH1047R have elevated dNTP levels. (left, middle) Nucleotides were extracted from primary MEFs & analysed by UPLC-MS/MS. The experiment was performed in triplicate & repeated 4 times independently. Error bars are sem, *p < 0.05, **p < 0.01. (right) Representative immunoblot from experimental cells. (c) Effect of NT5C knockdown on cellular dCTP levels. (left) Nucleotides were extracted from primary MEFs, stably expressing indicated siRNA, & analysed by UPLC-MS/MS. The experiment was performed in triplicate & repeated 3 times independently. Error bars are sem. (right) Representative immunoblot from experimental cells. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/28059163), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

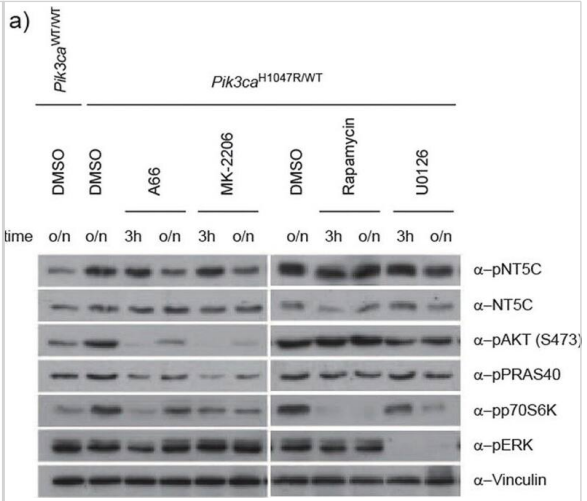
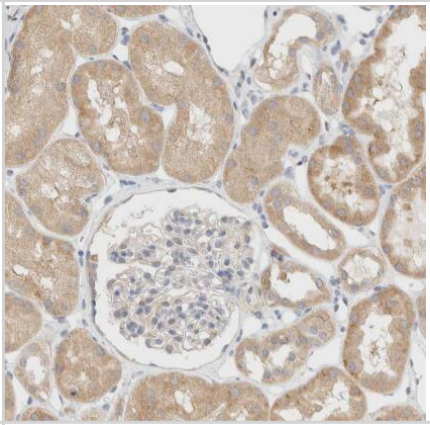
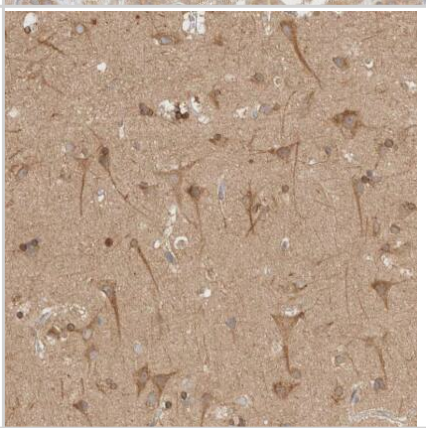


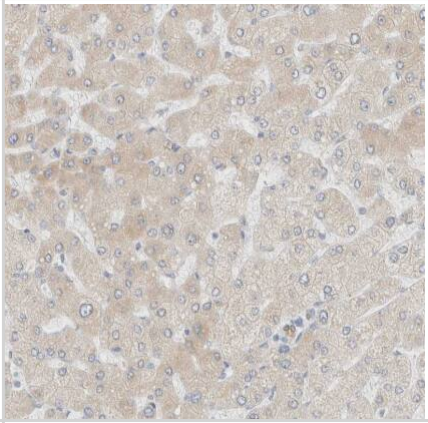
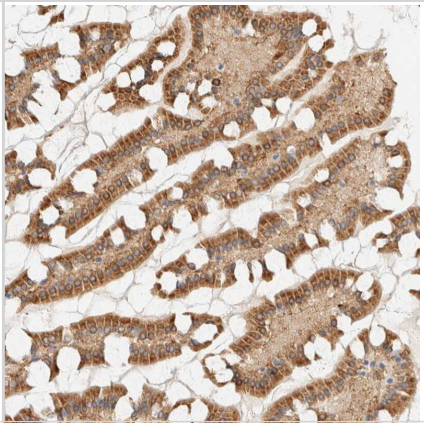
Western Blot: NT5C Antibody [NBP1-84563] - Regulation of NT5C S184 phosphorylation.(a) Sensitivity of S184 phosphorylation to PI3K pathway inhibitors. Primary MEFs were treated with A66 (3 μM), MK-2206 (1 μM), Rapamycin (20 nM), U0126 (10 μM) or DMSO as control for 3 h or overnight (o/n) for 16–18 h before lysis. (left) Lysates were immunoblotted as indicated. (right) Quantification of 4 independent experiments. Values are expressed relative to DMSO treated Pik3caH1047R/WT cells. Error bars are sem, **p < 0.01. (b) Sensitivity of S184 phosphorylation to growth factor deprivation. Indicated primary MEFs were grown in 10% FBS or starved overnight in 0.1% FBS. (top) Lysates were immunoblotted as indicated. (bottom) Quantification of 5 independent experiments. Values are expressed relative to Pik3caH1047R/WT cells grown in 10% FBS. Error bars are sem, ***p < 0.001. (c) Sensitivity of S184 phosphorylation to growth factor stimulation. Primary MEFs were starved overnight in 0.1% FBS & stimulated with FBS (10%), Insulin (100 nM) or EGF (100 ng/ml) for the indicated times before lysis. DMSO or MK-2206 (1 μM) was added at same time as stimuli. (top) Lysates were immunoblotted as indicated. (bottom) Quantification of 3–5 independent experiments. Values are expressed relative to time 0 for each stimuli. Error bars are sem. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/28059163), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: NT5C Antibody [NBP1-84563] - Impact of S184 phosphorylation of NT5C catalytic activity.(a) S184 phosphorylation does not regulate NT5C nucleotidase activity in vitro. (left) Immunoprecipitates of Flag-NT5C ectopically expressed in HEK293 cells were incubated with 5 mM of the indicated nucleotides. Phosphate release was measured using a malachite green colorimetric assay & expressed as a percent of total nucleotide. The experiment was performed in duplicate & repeated 3 times independently. Error bars are sem. (right) Representative immunoblot from experimental cells. (b) Cells expressing Pik3caH1047R have elevated dNTP levels. (left, middle) Nucleotides were extracted from primary MEFs & analysed by UPLC-MS/MS. The experiment was performed in triplicate & repeated 4 times independently. Error bars are sem, *p < 0.05, **p < 0.01. (right) Representative immunoblot from experimental cells. (c) Effect of NT5C knockdown on cellular dCTP levels. (left) Nucleotides were extracted from primary MEFs, stably expressing indicated siRNA, & analysed by UPLC-MS/MS. The experiment was performed in triplicate & repeated 3 times independently. Error bars are sem. (right) Representative immunoblot from experimental cells. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/28059163), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: NT5C Antibody [NBP1-84563] - Regulation of NT5C S184 phosphorylation.(a) Sensitivity of S184 phosphorylation to PI3K pathway inhibitors. Primary MEFs were treated with A66 (3 μM), MK-2206 (1 μM), Rapamycin (20 nM), U0126 (10 μM) or DMSO as control for 3 h or overnight (o/n) for 16–18 h before lysis. (left) Lysates were immunoblotted as indicated. (right) Quantification of 4 independent experiments. Values are expressed relative to DMSO treated Pik3caH1047R/WT cells. Error bars are sem, **p < 0.01. (b) Sensitivity of S184 phosphorylation to growth factor deprivation. Indicated primary MEFs were grown in 10% FBS or starved overnight in 0.1% FBS. (top) Lysates were immunoblotted as indicated. (bottom) Quantification of 5 independent experiments. Values are expressed relative to Pik3caH1047R/WT cells grown in 10% FBS. Error bars are sem, ***p < 0.001. (c) Sensitivity of S184 phosphorylation to growth factor stimulation. Primary MEFs were starved overnight in 0.1% FBS & stimulated with FBS (10%), Insulin (100 nM) or EGF (100 ng/ml) for the indicated times before lysis. DMSO or MK-2206 (1 μM) was added at same time as stimuli. (top) Lysates were immunoblotted as indicated. (bottom) Quantification of 3–5 independent experiments. Values are expressed relative to time 0 for each stimuli. Error bars are sem. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/28059163), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	
Immunohistochemistry-Paraffin: NT5C Antibody [NBP1-84563] -Staining of human kidney shows moderate cytoplasmic positivity in cells in tubules.	
Immunohistochemistry-Paraffin: NT5C Antibody [NBP1-84563] -Staining of human cerebral cortex shows moderate cytoplasmic positivity in neuronal cells.	

Immunohistochemistry-Paraffin: NT5C Antibody [NBP1-84563] -Staining of human liver shows weak cytoplasmic positivity in hepatocytes as expected.	
Staining of human intestine shows strong cytoplasmic positivity in glandular cells.	

Publications

Moniz LS, Surinova S, Ghazaly E et al. Phosphoproteomic comparison of Pik3ca and Pten signalling identifies the nucleotidase NT5C as a novel AKT substrate Sci Rep 2017-01-06 [PMID: 28059163] (WB, Human)

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

Products Related to NBP1-84563

NBP1-84563PEP	NT5C Recombinant Protein Antigen
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NBP1-84563

Earn gift cards/discounts by submitting a publication using this product: www.novusbio.com/publications