Product Datasheet

NKX6.1 Antibody - BSA Free
NBP1-82553

Unit Size: 0.1 ml

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

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Publications: 15

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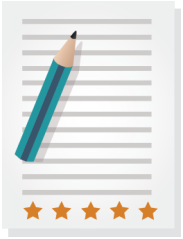
Updated 5/11/2026 v.20.1



NBP1-82553

NKX6.1 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	Affinity purified
Buffer	PBS (pH 7.2) and 40% Glycerol

Product Description

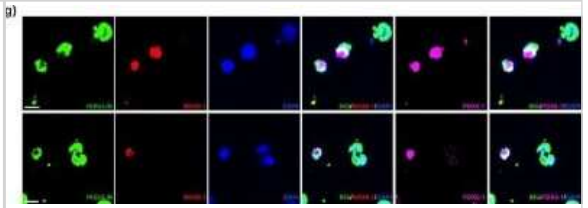
Host	Rabbit
Gene ID	4825
Gene Symbol	NKX6-1
Species	Human
Immunogen	This antibody was developed against Recombinant Protein corresponding to amino acids: PLGTHNPGGLKPPATGGLSSLGSPPQQLSAATPHGINDILSRPSM

Product Application Details

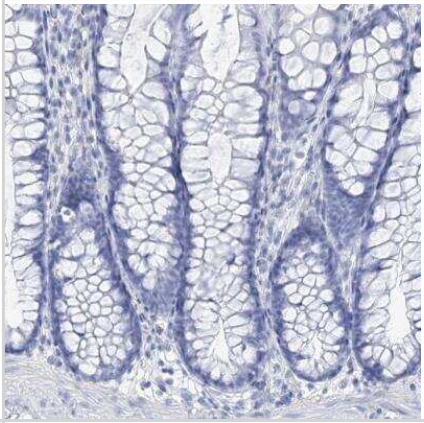
Applications	Immunohistochemistry-Paraffin, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Immunohistochemistry 1:200 - 1:500, Immunocytochemistry/ Immunofluorescence 0.25-2 ug/ml, Immunohistochemistry-Paraffin 1:200-1:500
Application Notes	For IHC-Paraffin, HIER pH 6 retrieval is recommended. ICC/IF Fixation Permeabilization: Use PFA/Triton X-100.

Images

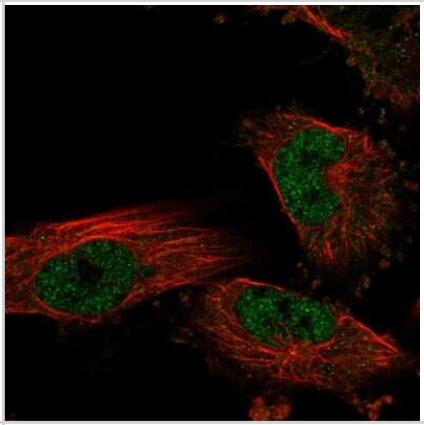
Immunocytochemistry/Immunofluorescence: NKX6.1 Antibody [NBP1-82553] - Comparison of the hiPSC differentiation outcome according to the stage of encapsulation. Whole mount immunofluorescence of encapsulated cells stained for insulin (green), NKX6.1 (red), PDX1 (purple) and DAPI (blue), gamma correction 0.4. Scale bars: 10 um. Graphs data are shown as mean +/- SEM. Image collected and cropped by CiteAb from the following publication (https://www.nature.com/articles/s41598-019-57305-x), licensed under a CC-BY license.



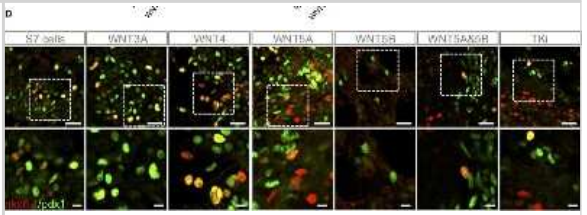
Immunohistochemistry-Paraffin: NKX6.1 Antibody [NBP1-82553] - Staining of human colon shows no positivity in glandular cells as expected.



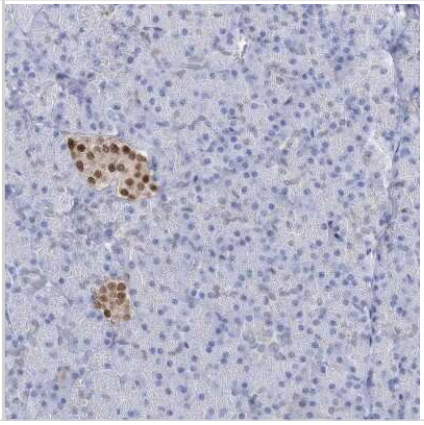
Immunocytochemistry/Immunofluorescence: NKX6.1 Antibody [NBP1-82553] - Staining of human cell line U-251 MG shows localization to nucleoplasm. Antibody staining is shown in green.



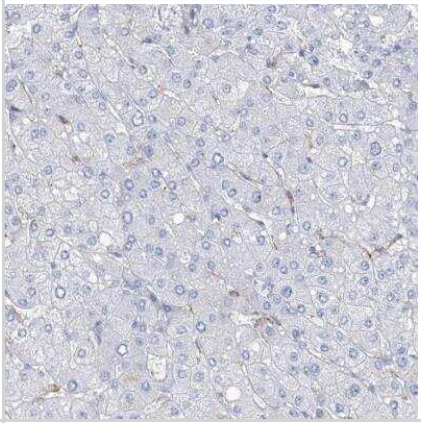
Immunocytochemistry/Immunofluorescence: NKX6.1 Antibody [NBP1-82553] - Wnt-modulation influences the distribution of mono-hormonal and bi-hormonal S7 cells. IF analysis of NKX6.1+ (red), PDX1+ (green) cells and NKX6.1+/PDX1+ cells (yellow). Scale bar upper panel: 25 um, lower panel: 7.5 um. Image collected and cropped by CiteAb from the following publication (https://www.frontiersin.org/article/10.3389/fendo.2019.00293/full), licensed under a CC-BY license.



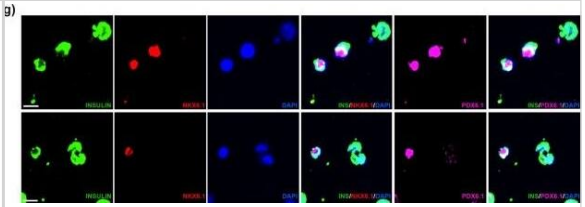
Immunohistochemistry-Paraffin: NKX6.1 Antibody [NBP1-82553] - Immunohistochemical staining of human pancreas shows strong nuclear positivity in islets of Langerhans.



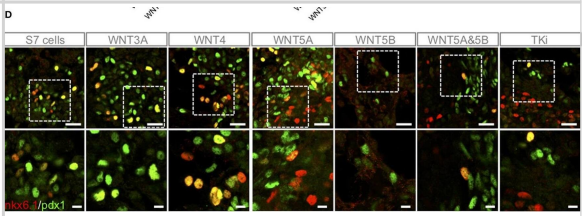
Immunohistochemistry-Paraffin: NKX6.1 Antibody [NBP1-82553] - Staining of human liver shows no positivity as expected.



Comparison of the hiPSC differentiation outcome according to the stage of encapsulation. (a) Scheme depicting the three cell populations analysed by immunofluorescence. (b) Proportion of the differentiated hiPSC-cells expressing insulin, glucagon or somatostatin in the three distinct populations analysed, quantified by Imaris software. (c) Proportion of bihormonal cells in the three distinct populations analyzed. (d) Proportion of the differentiated hiPSC-cells expressing PDX1 or NKX6.1 in the three distinct populations analysed. (e) Proportion of insulin + cells coexpressing PDX1 or NKX6.1. (f) High magnification confocal images of cells inside alginate capsules stained for insulin (green), glucagon (red), somatostatin (purple) and DAPI (blue) by whole mount immunofluorescence. (g) Whole mount immunofluorescence of encapsulated cells stained for insulin (green), NKX6.1 (red), PDX1 (purple) and DAPI (blue), gamma correction 0.4. Scale bars: 10 um. Graphs data are shown as mean +/- SEM. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/31942009), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Wnt-modulation influences the distribution of mono-hormonal and bi-hormonal S7 cells. (A) Representative schematic drawing and IF analysis for insulin+ (red), glucagon+ (green) cells and insulin+/glucagon + cells (yellow) of the respective S7 cell populations. (B) Calculations of insulin+ (red, left) and glucagon+ (green, right) cells were done as described in Methods. The y-axis shows the number of insulin+ and glucagon+ cells, respectively. The figure shows standard error of the mean (SEM) values for each of the columns in bar charts. **P < 0.006, ****P < 0.0001 vs. S7 cells with two-tailed t-test. No significant comparisons show no stars. The number of insulin+ cells and glucagon+ cells were normalized to total cell count (dapi+ cells) see Supplementary Figure 2. (C) Overlay of insulin+ and glucagon+ were used to count bi-hormonal cells, in which bi-hormonal (ins+glu+) cells were calculated as a fraction of insulin+ (red bar chart) and glucagon+ (green bar chart) cells, respectively. The figure shows standard error of the mean (SEM) values for each of the columns in bar charts. **P < 0.006, ****P < 0.0001 vs. S7 cells with two-tailed, type two t-test. No significant comparisons show no stars. (D) IF analysis of NKX6.1+ (red), PDX1+ (green) cells and NKX6.1+/PDX1+ cells (yellow). Scale bar upper panel: 25 µm, lower panel: 7.5 µm. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/31139151), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

J Siehler, AK Blöchinger, M Akgün, X Wang, A Shahryari, A Geerlof, H Lickert, I Burtscher Generation of a heterozygous C-peptide-mCherry reporter human iPSC line (HMGUi001-A-8) Stem Cell Research, 2020-12-16;50 (0):102126. 2020-12-16 [PMID: 33373890]

AK Blöchinger, J Siehler, K Wißmiller, A Shahryari, I Burtscher, H Lickert Generation of an INSULIN-H2B-Cherry reporter human iPSC line Stem Cell Res, 2020-04-22;45(0):101797. 2020-04-22 [PMID: 32361463]

Maachi H, Ghislain J, Tremblay C et Al. Pronounced proliferation of non-beta cells in response to beta-cell mitogens in isolated human islets of Langerhans Sci Rep 2021-05-28 [PMID: 34050242]

Qiao J, Zhang Z, Ji S et Al. A distinct role of STING in regulating glucose homeostasis through insulin sensitivity and insulin secretion Proc Natl Acad Sci U S A 2022-02-10 [PMID: 35145023]

Hermann FM, Kjaergaard MF, Tian C et al. An insulin hypersecretion phenotype precedes pancreaticb cell failure in MODY3 patient-specific cells Cell stem cell 2022-12-19 [PMID: 36563694]

Ghila L, Bjorlykke Y, Legoy TA et al. Bioinformatic Analyses of miRNA-mRNA Signature during hiPSC Differentiation towards Insulin-Producing Cells upon HNF4 alpha Mutation Biomedicines 2020-06-27 [PMID: 32605028] (ICC/IF, Human)

Legoy TA, Vethe H, Abadpour S et al. Encapsulation boosts islet-cell signature in differentiating human induced pluripotent stem cells via integrin signalling Sci Rep 2020-01-15 [PMID: 31942009] (ICC/IF, Human)

Legoy TA, Ghila L, Vethe H et al. In vivo hyperglycemia exposure elicits distinct period-dependent effects on human pancreatic progenitor differentiation, conveyed by oxidative stress Acta Physiol (Oxf) 2019-12-23 [PMID: 31872528] (IF/IHC, Mouse)

Wang X, Malinowski AR, Beckenbauer J et al. Generation of a human induced pluripotent stem cell line (HMGUi002-A) from a healthy male individual Stem Cell Res 2019-08-07 [PMID: 31419739] (FLOW, Human)

Duijkers FA, McDonald A, Janssens GE et al. The Effect of Wnt Pathway Modulators on Human iPSC-Derived Pancreatic Beta Cell Maturation Front Endocrinol (Lausanne) 2019-05-08 [PMID: 31139151] (ICC/IF, Human)

Wang X, Sterr M, Ansarullah et al. Point mutations in the PDX1 transactivation domain impair human b-cell development and function Mol Metab 2019-03-20 [PMID: 30930126] (FLOW, ICC/IF, Human)

Vethe H, Bjorlykke Y, Ghila LM et al. Probing the missing mature B-cell proteomic landscape in differentiating patient iPSC-derived cells Sci Rep 2017-07-06 [PMID: 28684784] (ICC/IF, Human)

More publications at http://www.novusbio.com/NBP1-82553

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