Product Datasheet

Apolipoprotein E R2/ApoE R2 Antibody - BSA Free
NB100-2216

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: 8

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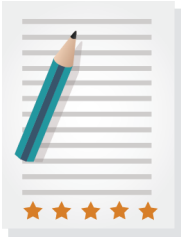
Updated 9/9/2025 v.20.1



NB100-2216

Apolipoprotein E R2/ApoE R2 Antibody - BSA Free

Product Information

Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS

Product Description

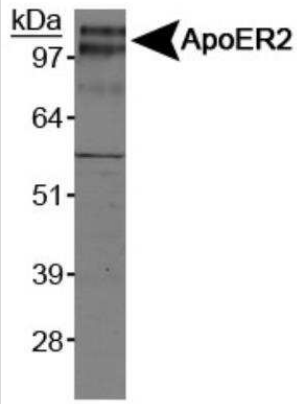
Description	Novus Biologicals Rabbit Apolipoprotein E R2/ApoE R2 Antibody - BSA Free (NB100-2216) is a polyclonal antibody validated for use in WB and ICC/IF. Anti-Apolipoprotein E R2/ApoE R2 Antibody: Cited in 8 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	7804
Gene Symbol	LRP8
Species	Human, Mouse, Chicken
Reactivity Notes	Immunogen displays the following percentage of sequence identity for non-tested species: bovine (95%).
Immunogen	A synthetic peptide made to a C-terminal portion of the human ApoER2 protein sequence (between residues 863-963). [UniProt# Q14114]

Product Application Details

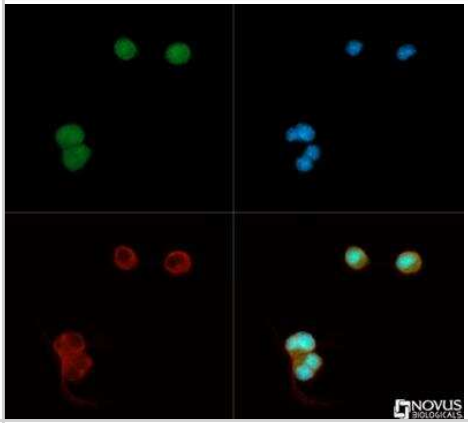
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, SDS-Page
Recommended Dilutions	Western Blot 2 ug/ml, Immunocytochemistry/ Immunofluorescence 1:200-1:500, SDS-Page reported in scientific literature (PMID 27810638)
Application Notes	A band is seen at ~106 kDa representing the membrane form of ApoER2 in Western Blot. A larger ~130 kDa band may also be seen, representing the glycosylated form of ApoER2.

Images

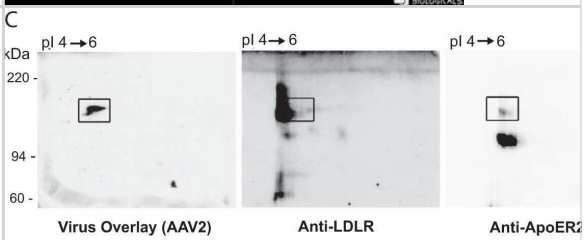
Western Blot: Apolipoprotein E R2/ApoE R2 Antibody [NB100-2216] - Analysis of ApoER2 on mouse brain membrane.



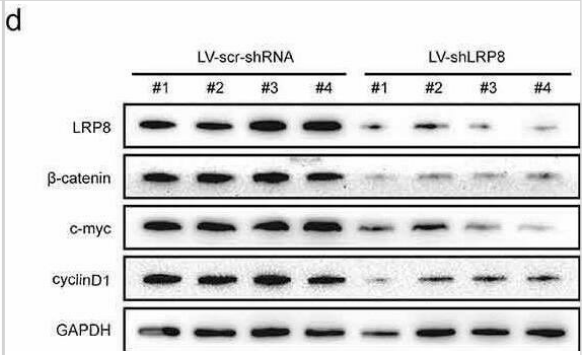
Immunocytochemistry/Immunofluorescence: Apolipoprotein E R2/ApoE R2 Antibody [NB100-2216] - Antibody was tested in Neuro-2a cells with Dylight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red).



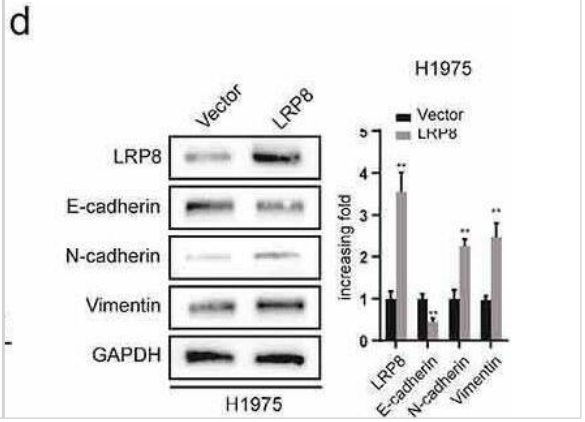
The identity of the AAV-BP is AAVR, the multiserotype AAV receptor. (A) Virus overlay assay of cell membrane fractions from different types of cells. Membrane proteins were extracted from various types of cells, and 100 µg of membrane proteins was used to perform a virus overlay assay with purified wild-type AAV2 particles (56). The arrow indicates a strong binding band at 150 kDa, designated AAV-BP. (B) Summary of the top five genes that correspond to the peptide sequences from the mass spectrometry analysis of the AAV-BP band. AAVR is also denoted KIAA0319L. (C) One hundred micrograms of PSA-purified HeLa S3 membrane proteins was separated on a 2-D gel and transferred onto a PVDF membrane for a virus overlay assay with rAAV2, followed by reprobing with anti-LDLR, anti-ApoER2, anti-ORP150, or anti-AAVR antibody. (D) One hundred micrograms of N- and O-deglycosylated crude HeLa S3 cell membrane proteins was separated by 2-D electrophoresis and underwent a virus overlay assay, followed by reprobing with a rabbit polyclonal antibody to integrin α5. Squares indicate an identical area of the membrane. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/28679762), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



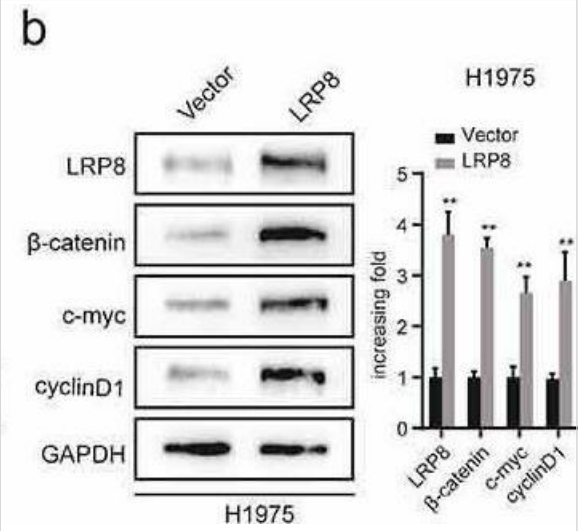
Knockdown of LRP8 inhibited tumor growth in vivo. (a) The pictures of nude mice injected with Lv-sh-LRP8 and corresponding control and the tumors formed after 28-day feeding. (b–c) Tumor volumes and weights were calculated between the two groups. (d) Western blotting experiments detecting the expression of Wnt/β-catenin signaling components and LRP8 expression in subcutaneous tumors. **p < 0.01. Three independent trials in each experiment were needed, and the data were presented as mean +/- SD. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/35246020), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



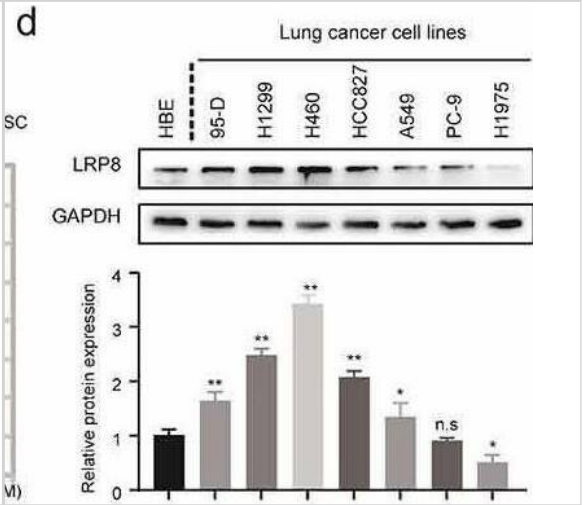
LRP8 enhanced the metastasis of NSCLC cells. (a) Transwell analysis was performed to compare the metastasis potential in the LRP8 knockdown group. (b) H1975 cells migration and invasion capability were detected by transwell assays. The expression of proteins related to metastasis in H1299 and H460 cells (c) and H1975 cells (d) were detected by Western blotting. **p < 0.01. At least three replicate experiments were performed, and the final results were presented as mean +/- SD. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/35246020), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



LRP8 motivated NSCLC cells development and metastasis via the Wnt/β-catenin signaling pathway. (a) Expression of Wnt/β-catenin signaling components after silencing LRP8 as detected by Western blotting assays. (b) Expression of Wnt/β-catenin signaling-related factors in overexpression LRP8 group of H1975 cells. CCK-8 assay (c) and colony formation analysis (d) were carried out to evaluate the proliferation abilities of H1299 and H460 cells transfected with LRP8 siRNA or negative vector or LiCl and LRP8 siRNA. (e) Invasion and migration of H1299 and H460 cells after LRP8 downregulation and LiCl addition as detected by Transwell assay. (f) Western blotting analysis for E-cadherin, Vimentin, and N-cadherin to detect the effect of LiCl in LRP8 knockdown. (g) Western blotting assays were performed to elaborate the role of LiCl in Wnt/β-catenin signaling-related factors induced by LRP8 silencing. **p < 0.01. Each experiment was repeated in three independent trials, and mean +/- SD was used to describe the results. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/35246020), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



LRP8 is related to the poor prognosis of NSCLC patients. (a–c) Expression of LRP8 in NSCLC tissues as analyzed by TIMER and StarBase3.0 databases. (d) Western blotting assays to detect the expression of LRP8 in seven NSCLC cell lines and the normal bronchial epithelioid cells. (e) Immunohistochemistry staining of two representative cases showing the expression and location of LRP8 in NSCLC tissues. (f) Four-grid table showing the statistical difference of LRP8 level between tumor tissues and normal adjacent tissues. (g) Kaplan–Meier curve based on LRP8 expression in 60 NSCLC patients (log-rank test, p < 0.05). n.s, no significant difference, *p < 0.05, **p < 0.01. At least three independent biological experiments were repeated, and the data were presented as mean +/- SD. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/35246020), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



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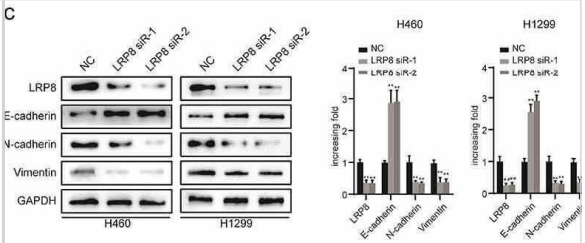
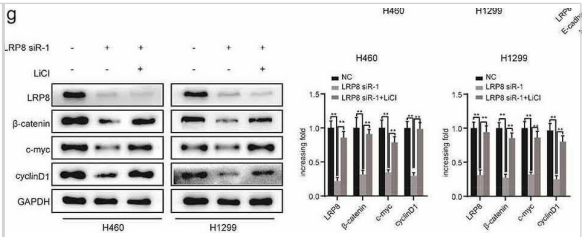
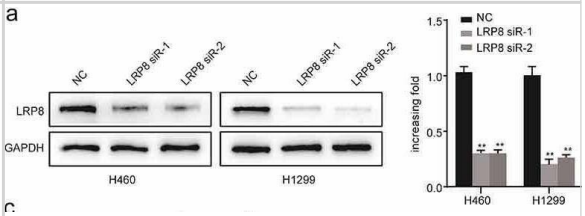
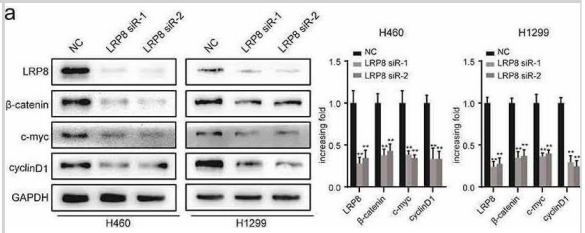


LRP8 motivated NSCLC cells development and metastasis via the Wnt/β-catenin signaling pathway. (a) Expression of Wnt/β-catenin signaling components after silencing LRP8 as detected by Western blotting assays. (b) Expression of Wnt/β-catenin signaling-related factors in overexpression LRP8 group of H1975 cells. CCK-8 assay (c) and colony formation analysis (d) were carried out to evaluate the proliferation abilities of H1299 and H460 cells transfected with LRP8 siRNA or negative vector or LiCl and LRP8 siRNA. (e) Invasion and migration of H1299 and H460 cells after LRP8 downregulation and LiCl addition as detected by Transwell assay. (f) Western blotting analysis for E-cadherin, Vimentin, and N-cadherin to detect the effect of LiCl in LRP8 knockdown. (g) Western blotting assays were performed to elaborate the role of LiCl in Wnt/β-catenin signaling-related factors induced by LRP8 silencing. **p < 0.01. Each experiment was repeated in three independent trials, and mean +/- SD was used to describe the results. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/35246020), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	
LRP8 promoted NSCLC proliferation in vitro. Western blotting experiments were conducted to validate the transfection efficiency of LRP8 siRNA in H460 and H1299 (a) and LRP8 overexpression plasmid in H1975 (d). CCK-8 assay was used to evaluate the proliferation ability of H460 and H1299 cells transfected with LRP8 siRNAs (b) and H1975 cells with LRP8 plasmid (e). (c) Colony formation analysis showing differences in H1299 and H460 cell proliferation among the three groups. (f) H1975 cell viability was measured using colony formation analysis. **p < 0.01. All experiments were performed independently at least three times, and the results were presented as mean +/- SD. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/35246020), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	
LRP8 motivated NSCLC cells development and metastasis via the Wnt/β-catenin signaling pathway. (a) Expression of Wnt/β-catenin signaling components after silencing LRP8 as detected by Western blotting assays. (b) Expression of Wnt/β-catenin signaling-related factors in overexpression LRP8 group of H1975 cells. CCK-8 assay (c) and colony formation analysis (d) were carried out to evaluate the proliferation abilities of H1299 and H460 cells transfected with LRP8 siRNA or negative vector or LiCl and LRP8 siRNA. (e) Invasion and migration of H1299 and H460 cells after LRP8 downregulation and LiCl addition as detected by Transwell assay. (f) Western blotting analysis for E-cadherin, Vimentin, and N-cadherin to detect the effect of LiCl in LRP8 knockdown. (g) Western blotting assays were performed to elaborate the role of LiCl in Wnt/β-catenin signaling-related factors induced by LRP8 silencing. **p < 0.01. Each experiment was repeated in three independent trials, and mean +/- SD was used to describe the results. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/35246020), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

Publications

Tatsuaki Daimon, Atrayee Bhattacharya, Keyi Wang, Naoki Haratake, Ayako Nakashoji, Hiroki Ozawa, Yoshihiro Morimoto, Nami Yamashita, Takeo Kosaka, Mototsugu Oya, Donald W. Kufe MUC1-C is a target of salinomycin in inducing ferroptosis of cancer stem cells Cell Death Discovery 2024-01-05 [PMID: 38182558]

Heo J, Kang H Platelet-derived growth factor-stimulated pulmonary artery smooth muscle cells regulate pulmonary artery endothelial cell dysfunction through extracellular vesicle miR-409-5p Biological chemistry 2023-10-31 [PMID: 37903646]

Li Q, Morrill NK, Moerman-Herzog AM et al. Central repeat fragment of reelin leads to active reelin intracellular signaling and rescues cognitive deficits in a mouse model of reelin deficiency Cellular signalling 2023-06-12 [PMID: 37315752] (WB, Human)

Ding J, Bowes R C. Synaptic Expression of Apoer2 in the Plexiform Layers of Mouse Retina. J Comp Neurol 2000-07-25 [PMID: 10906706]

Fang Z, Zhong M, Zhou L et al. Low-density lipoprotein receptor-related protein 8 facilitates the proliferation and invasion of non-small cell lung cancer cells by regulating the Wnt/beta-catenin signaling pathway Bioengineered 2022-03-01 [PMID: 35246020] (WB, Human)

Arimitsu N, Taka, K, Fujiwara N, et al. Roles of Reelin/Disabled1 pathway on functional recovery of hemiplegic mice after neural cell transplantation; Reelin promotes migration toward motor cortex and maturation to motoneurons of neural grafts Exp. Neurol. 2019-06-08 [PMID: 31185198] (ICC/IF, Mouse)

Pillay S, Zou W, Cheng F et al. AAV serotypes have distinctive interactions with domains of the cellular receptor AAVR J. Virol. 2017-07-05 [PMID: 28679762] (WB, Human)

Wang W, Moerman-Herzog AM, Slaton A, Barger SW Presenilin 1 mutations influence processing and trafficking of the ApoE receptor apoER2. Neurobiol. Aging 2016-10-11 [PMID: 27810638] (WB, PAGE, Mouse)

Procedures

Western Blot Protocol for ApoER2 Antibody (NB100-2216)
Apolipoprotein E R2/ApoE R2 Antibody:
Western Blot Protocol

1. Perform SDS-PAGE (4-12%) on samples to be analyzed, loading 35 ug of total protein per lane.
2. Transfer proteins to Nitrocellulose according to the instructions provided by the manufacturer of the transfer apparatus.
3. Rinse membrane with dH2O and then stain the blot using ponceau S for 1-2 minutes to access the transfer of proteins onto the nitrocellulose membrane. Rinse the blot in water to remove excess stain and mark the lane locations and locations of molecular weight markers using a pencil.
4. Rinse the blot in TBS for approximately 5 minutes.
5. Block the membrane using 5% non-fat dry milk + 1% BSA in TBS for 2 hours at room temperature (RT).
6. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
7. Dilute the rabbit anti-ApoER2 primary antibody (NB 100-2216) in blocking buffer and incubate overnight at 4C.
8. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
9. Apply the diluted rabbit-IgG 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 [TBS + 0.1% Tween] 3 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 (we used BioFX Super Plus ECL).

Note: Tween-20 can be added to the blocking or antibody diultion buffer at a final concentration of 0.05-0.2%, provided it does not interfere with antibody-antigen binding.

Immunocytochemistry/Immunofluorescence Protocol for ApoER2 Antibody (NB100-2216)
Apolipoprotein E R2/ApoE R2 Antibody:
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.

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

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Products Related to NB100-2216

NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
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.

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