abcam

Product datasheet

Anti-Niemann Pick C2 antibody [EPR19993-145-1] - BSA and Azide free ab251560

KO 評価済 リコンビナント RabMAb

画像数 13

製品の概要

製品名	Anti-Niemann Pick C2 antibody [EPR19993-145-1] - BSA and Azide free
製品の詳細	Rabbit monoclonal [EPR19993-145-1] to Niemann Pick C2 - BSA and Azide free
由来種	Rabbit
アプリケーション	**適用あり:** ICC/IF, IHC-P, Flow Cyt (Intra), WB
種交差性	**交差種:** Mouse, Rat, Human
免疫原	Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: Human fetal kidney and spleen lysates; Mouse kidney lysate; Rat kidney and spleen lysates; HEK-293T, HepG2, C6, RAW 264.7, PC-12 and NIH/3T3 whole cell lysates. IHC-P: Human epididymis and testis tissues, human breast carcinoma; Mouse and rat kidney tissues. Flow Cyt (intra): HepG2 and NIH/3T3 cells.
特記事項	ab251560 is the carrier-free version of **ab218192**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C. Do Not Freeze.
バッファー	pH: 7.2 Constituent: PBS
キャリア・フリー	はい
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR19993-145-1
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab251560の使用に適用されます**

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

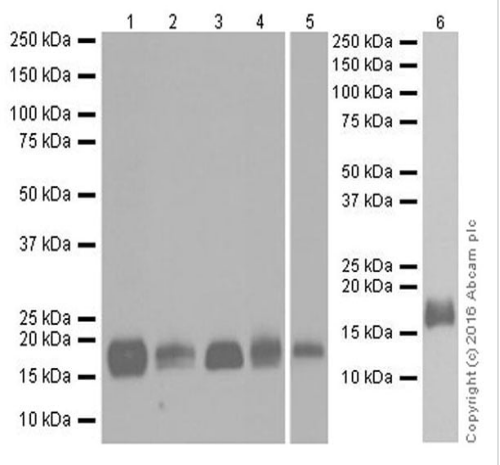
アプリケーション	Abreviews	特記事項
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 16-18 kDa (predicted molecular weight: 17 kDa).

ターゲット情報

機能	May be involved in the regulation of the lipid composition of sperm membranes during the maturation in the epididymis.
組織特異性	Epididymis.
関連疾患	Defects in NPC2 are the cause of Niemann-Pick disease type C2 (NPDC2) [MIM:607625]. A lysosomal storage disorder that affects the viscera and the central nervous system. It is due to defective intracellular processing and transport of low-density lipoprotein derived cholesterol. It causes accumulation of cholesterol in lysosomes, with delayed induction of cholesterol homeostatic reactions. Niemann-Pick disease type C2 has a highly variable clinical phenotype. Clinical features include variable hepatosplenomegaly and severe progressive neurological dysfunction such as ataxia, dystonia and dementia. The age of onset can vary from infancy to late adulthood.

配列類似性	Belongs to the NPC2 family.
細胞内局在	Secreted.

画像



Western blot - Anti-Niemann Pick C2 antibody [EPR19993-145-1] - BSA and Azide free (ab251560)

All lanes : Anti-Niemann Pick C2 antibody [EPR19993-145-1] (**ab218192**) at 1/5000 dilution

Lane 1 : Human fetal kidney lysate
Lane 2 : Mouse kidney lysate
Lane 3 : Rat kidney lysate
Lane 4 : HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate
Lane 5 : Rat spleen lysate
Lane 6 : Human spleen lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

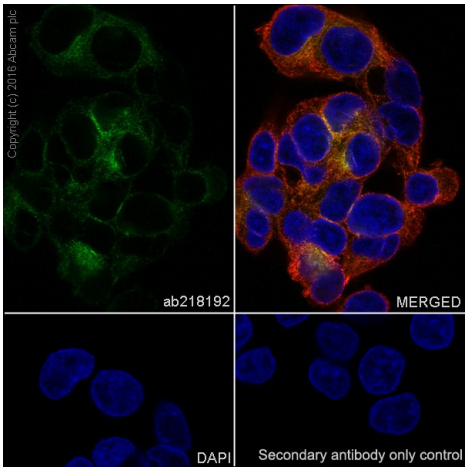
Predicted band size: 17 kDa
Observed band size: 16-18 kDa

This data was developed using **ab218192**, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure times: Lanes 1-4: 4 seconds; Lanes 5-6: 15 seconds.

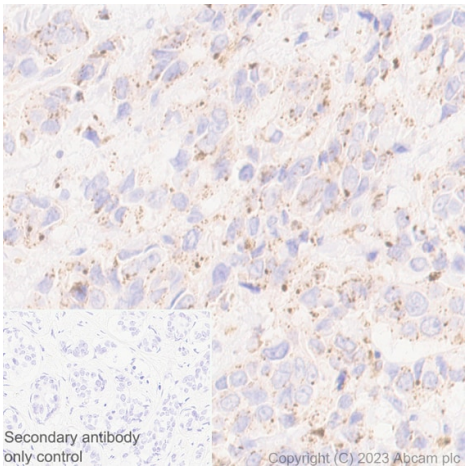
Niemann Pick C2 can be glycosylated, the WB pattern is consistent with references PMID: 16374838; 22183894.



Immunocytochemistry/ Immunofluorescence - Anti-Niemann Pick C2 antibody [EPR19993-145-1] - BSA and Azide free (ab251560)

This data was developed using **ab218192**, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (Human liver hepatocellular carcinoma cell line) cells labeling Niemann Pick C2 with **ab218192** at 1/100 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on HepG2 cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with **ab195889** (Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594)) at 1/200 dilution (red). Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution.

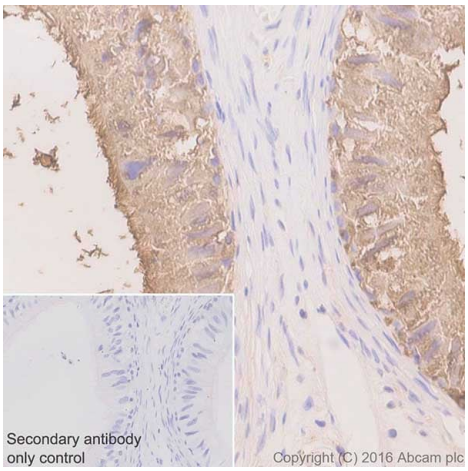


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Niemann Pick C2 antibody [EPR19993-145-1] - BSA and Azide free (ab251560)

This data was developed using **ab218192**, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human breast carcinoma labelling Niemann Pick C2 with **ab218192** at 1/8000 dilution, followed by a Goat Anti-Rabbit IgG H&L (HRP polymer) ready to use (**ab214880**).

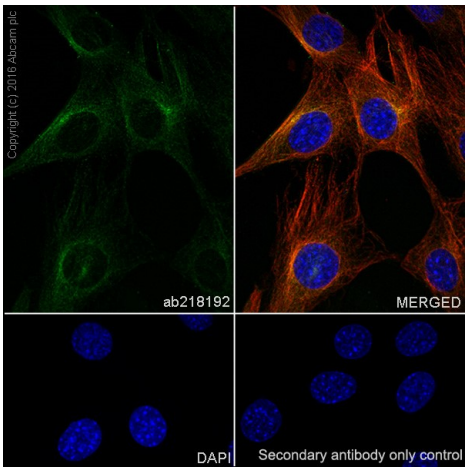
Positive staining on Human breast carcinoma is observed. Counter stained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a Goat Anti-Rabbit IgG H&L (HRP polymer) ready to use. Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Niemann Pick C2 antibody [EPR19993-145-1] - BSA and Azide free (ab251560)

This data was developed using **ab218192**, the same antibody clone in a different buffer formulation.

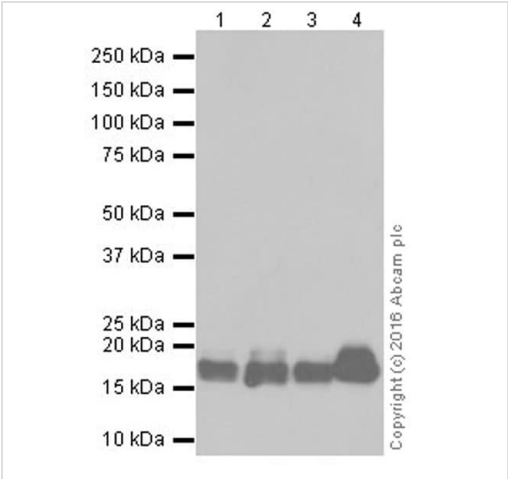
Immunohistochemical analysis of paraffin-embedded human epididymis tissue labeling Niemann Pick C2 with **ab218192** at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Cytoplasmic staining on human epididymis [PMID: 8924505]. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Niemann Pick C2 antibody [EPR19993-145-1] - BSA and Azide free (ab251560)

This data was developed using **ab218192**, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized NIH/3T3 (Mouse embryonic fibroblast cell line) cells labeling Niemann Pick C2 with **ab218192** at 1/100 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on NIH/3T3 cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with **ab195889** (Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594)) at 1/200 dilution (red). Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution.



Western blot - Anti-Niemann Pick C2 antibody [EPR19993-145-1] - BSA and Azide free (ab251560)

All lanes : Anti-Niemann Pick C2 antibody [EPR19993-145-1] (**ab218192**) at 1/2000 dilution

Lane 1 : C6 (Rat glial tumor cell line) whole cell lysate
Lane 2 : RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate
Lane 3 : PC-12 (Rat adrenal gland pheochromocytoma cell line) whole cell lysate
Lane 4 : NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

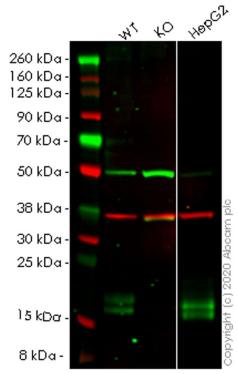
Predicted band size: 17 kDa
Observed band size: 16-18 kDa

Exposure time: 10 seconds

This data was developed using **ab218192**, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

Niemann Pick C2 can be glycosylated, the WB pattern is consistent with references PMID:16374838; 22183894.



Western blot - Anti-Niemann Pick C2 antibody [EPR19993-145-1] - BSA and Azide free (ab251560)

All lanes : Anti-Niemann Pick C2 antibody [EPR19993-145-1] (**ab218192**) at 1/1000 dilution

Lane 1 : Wild-type HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate
Lane 2 : NPC2 knockout HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate
Lane 3 : HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

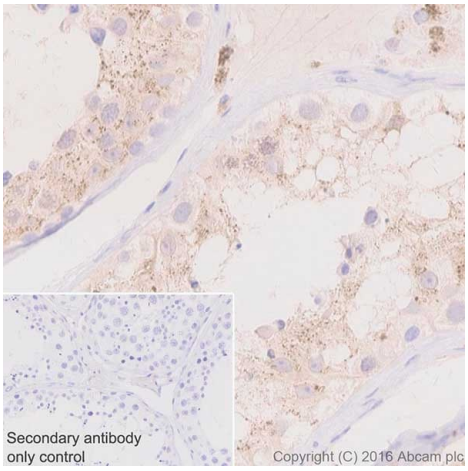
Secondary
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/10000 dilution

Predicted band size: 17 kDa
Observed band size: 16-18 kDa

This data was developed using **ab218192**, the same antibody clone in a different buffer formulation.

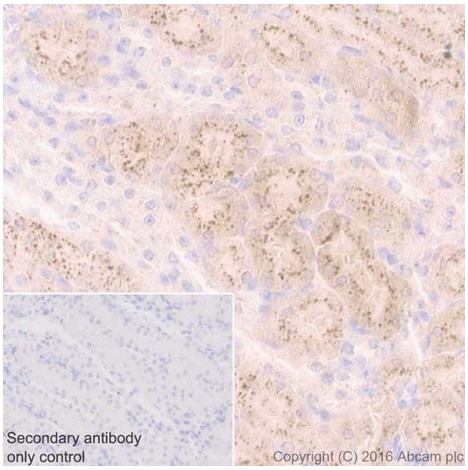
Lanes 1-3: Merged signal (red and green). Green - **ab218192** observed at 16-18 kDa. Red - loading control **ab8245** observed at 36 kDa.

ab218192 Anti-Niemann Pick C2 antibody [EPR19993-145-1] was shown to specifically react with Niemann Pick C2 in wild-type HEK-293T cells. Loss of signal was observed when knockout cell line **ab266749** (knockout cell lysate **ab258079**) was used. Wild-type and Niemann Pick C2 knockout samples were subjected to SDS-PAGE. **ab218192** and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



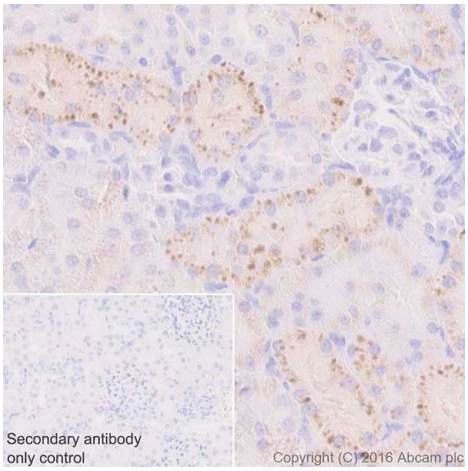
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Niemann Pick C2 antibody [EPR19993-145-1] - BSA and Azide free (ab251560)

This data was developed using **ab218192**, the same antibody clone in a different buffer formulation.Immunohistochemical analysis of paraffin-embedded human testis tissue labeling Niemann Pick C2 with **ab218192** at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Granularly cytoplasmic staining on human testis [PMID: 8924505]. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



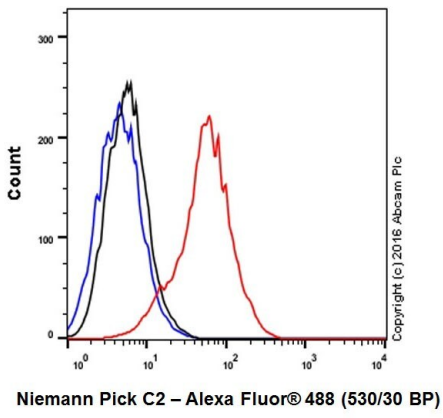
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Niemann Pick C2 antibody [EPR19993-145-1] - BSA and Azide free (ab251560)

This data was developed using **ab218192**, the same antibody clone in a different buffer formulation.Immunohistochemical analysis of paraffin-embedded mouse kidney tissue labeling Niemann Pick C2 with **ab218192** at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Granularly cytoplasmic staining on mouse kidney tubules [PMID: 24147030]. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Niemann Pick C2 antibody [EPR19993-145-1] - BSA and Azide free (ab251560)

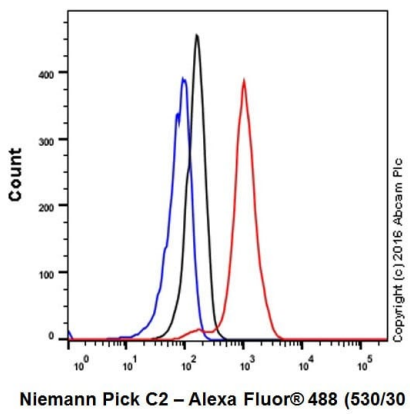
This data was developed using **ab218192**, the same antibody clone in a different buffer formulation.Immunohistochemical analysis of paraffin-embedded rat kidney tissue labeling Niemann Pick C2 with **ab218192** at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Granularly cytoplasmic staining on rat kidney tubules [PMID: 24147030]. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-Niemann Pick C2 antibody [EPR19993-145-1] - BSA and Azide free (ab251560)

This data was developed using **ab218192**, the same antibody clone in a different buffer formulation.

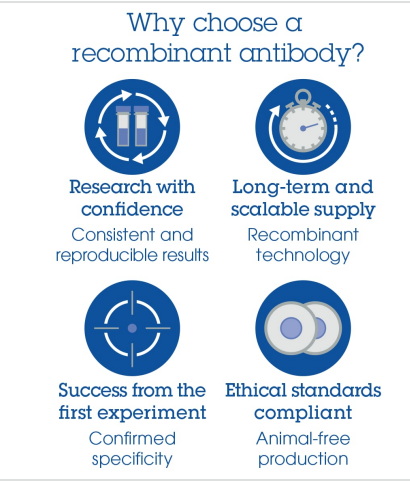
Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HepG2 (Human liver hepatocellular carcinoma cell line) cells labeling Niemann Pick C2 with **ab218192** at 1/70 dilution (red) compared with a rabbit monoclonal IgG isotype control (**ab172730**; black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.



Flow Cytometry (Intracellular) - Anti-Niemann Pick C2 antibody [EPR19993-145-1] - BSA and Azide free (ab251560)

This data was developed using **ab218192**, the same antibody clone in a different buffer formulation.

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed NIH/3T3 (Mouse embryonic fibroblast cell line) cells labeling Niemann Pick C2 with **ab218192** at 1/70 dilution (red) compared with a rabbit monoclonal IgG isotype control (**ab172730**; black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.



Anti-Niemann Pick C2 antibody [EPR19993-145-1] - BSA and Azide free (ab251560)

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