abcam

Product datasheet

Anti-NAGLU/NAG antibody [EPR20708] ab214671

Recombinant RabMAb

2 References 11 Images

Overview

Product name	Anti-NAGLU/NAG antibody [EPR20708]
Description	Rabbit monoclonal [EPR20708] to NAGLU/NAG
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, ICC/IF, IHC-P
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	**This product was produced with the following immunogens:** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human placenta, liver and fetal kidney lysates; HepG2 whole cell lysate; Mouse colon and testis lysates; Rat colon, testis, liver and spleen lysates. IHC-P: Human kidney and liver tissues; Mouse and rat kidney tissues. ICC/IF: HepG2 and Hepa1-6 cells. Flow Cyt (intra): Hepa1-6 and HepG2 cells.
General notes	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**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 0.05% BSA, 40% Glycerol, PBS

Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20708
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab214671 in the following tested applications.

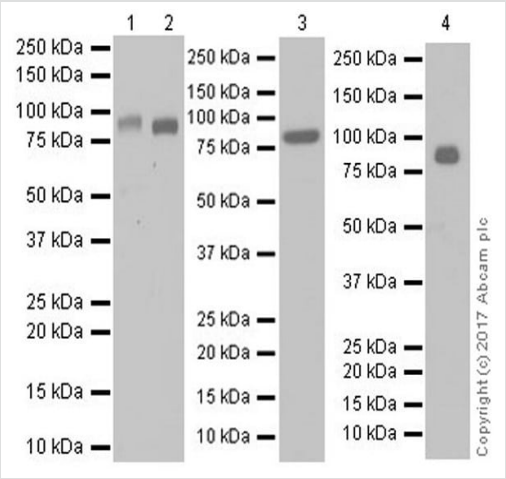
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/50.
WB		1/1000. Detects a band of approximately 82 kDa (predicted molecular weight: 82 kDa). Additional bands observed in some rodent tissue lysates where NAGLU is not highly expressed.
ICC/IF		1/100.
IHC-P		1/4000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

Function	Involved in the degradation of heparan sulfate.
Tissue specificity	Liver, ovary, peripheral blood leukocytes, testis, prostate, spleen, colon, lung, placenta and kidney.
Involvement in disease	Defects in NAGLU are the cause of mucopolysaccharidosis type 3B (MPS3B) [MIM:252920]; also known as Sanfilippo syndrome B. MPS3B is a form of mucopolysaccharidosis type 3, an autosomal recessive lysosomal storage disease due to impaired degradation of heparan sulfate. MPS3 is characterized by severe central nervous system degeneration, but only mild somatic disease. Onset of clinical features usually occurs between 2 and 6 years; severe neurologic degeneration occurs in most patients between 6 and 10 years of age, and death occurs typically during the second or third decade of life.
Cellular localization	Lysosome.

Images



Western blot - Anti-NAGLU/NAG antibody [EPR20708] (ab214671)

Lanes 1-3 : Anti-NAGLU/NAG antibody [EPR20708] (ab214671) at 1/1000 dilution
Lane 4 : Anti-NAGLU/NAG antibody [EPR20708] (ab214671) at 1/5000 dilution

Lane 1 : Human placenta lysate at 20 µg
Lane 2 : Human liver lysate at 20 µg
Lane 3 : Human fetal kidney lysate at 10 µg
Lane 4 : HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate at 10 µg

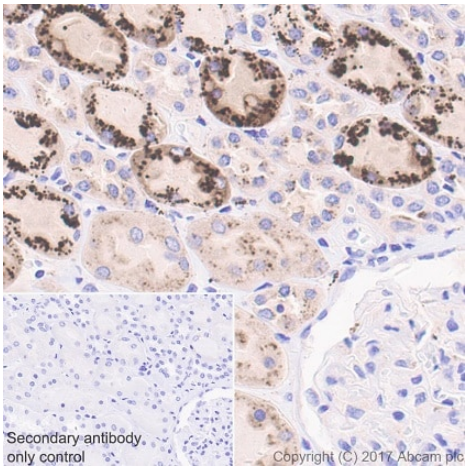
Secondary
Lanes 1-2 : VeriBlot for IP Detection Reagent (HRP) (**ab131366**) at 1/4000 dilution
Lanes 3-4 : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Developed using the ECL technique.

Predicted band size: 82 kDa
Observed band size: 82 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lanes 1-2: 1 minute; Lanes 3-4: 30 seconds.

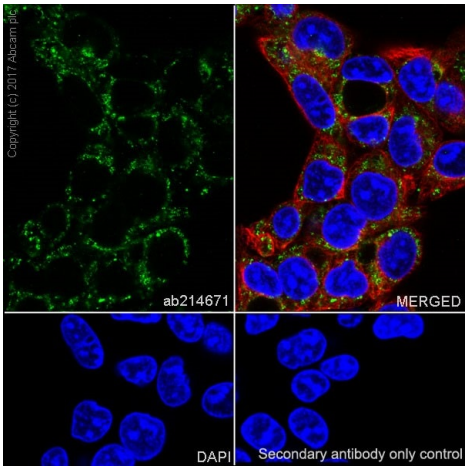


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NAGLU/NAG antibody [EPR20708] (ab214671)

Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling NAGLU/NAG with ab214671 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Granular cytoplasmic staining on human kidney tubules (PMID: 4291567, PMID: 24244710). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

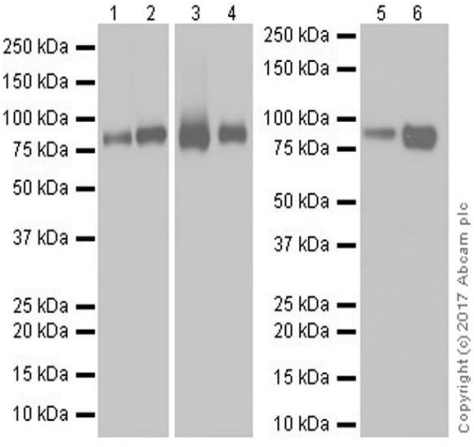


Immunocytochemistry/ Immunofluorescence - Anti-NAGLU/NAG antibody [EPR20708] (ab214671)

Immunofluorescent analysis of 100% methanol-fixed HepG2 (human liver hepatocellular carcinoma cell line) cells labeling NAGLU/NAG with ab214671 at 1/100 dilution followed by Goat Anti-Rabbit IgG H&L (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 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.



Western blot - Anti-NAGLU/NAG antibody [EPR20708] (ab214671)

Lanes 1-4 : Anti-NAGLU/NAG antibody [EPR20708] (ab214671) at 1/2000 dilution
Lanes 5-6 : Anti-NAGLU/NAG antibody [EPR20708] (ab214671) at 1/1000 dilution

Lane 1 : Mouse colon lysate at 20 µg
Lane 2 : Rat testis lysate at 20 µg
Lane 3 : Mouse testis lysate at 20 µg
Lane 4 : Rat colon lysate at 20 µg
Lane 5 : Rat liver lysate at 10 µg
Lane 6 : Rat spleen lysate at 10 µg

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

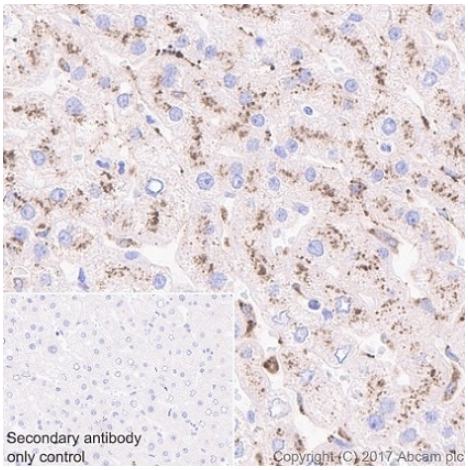
1/100000 dilution

Developed using the ECL technique.

Predicted band size: 82 kDa
Observed band size: 82 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lanes 1-2,5-6: 3 minutes; Lanes 3-4: 30 seconds.

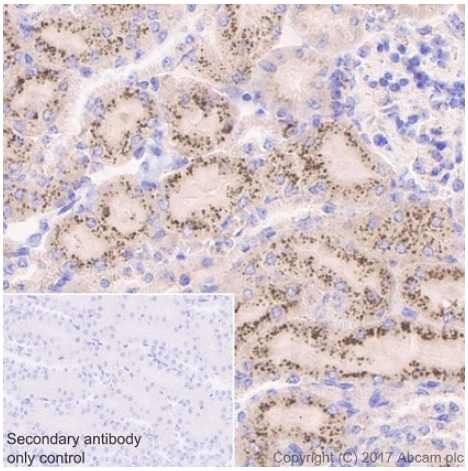


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NAGLU/NAG antibody [EPR20708] (ab214671)

Immunohistochemical analysis of paraffin-embedded human liver tissue labeling NAGLU/NAG with ab214671 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Granular cytoplasmic staining on human liver (PMID: 4291567, PMID: 8776591). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

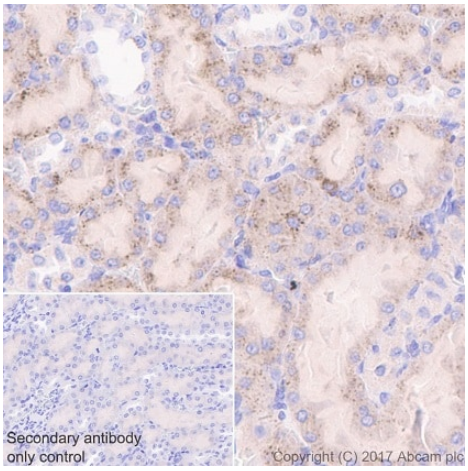


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NAGLU/NAG antibody [EPR20708] (ab214671)

Immunohistochemical analysis of paraffin-embedded mouse kidney tissue labeling NAGLU/NAG with ab214671 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Granular cytoplasmic staining on mouse kidney tubules (PMID: 4291567, PMID: 24244710). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

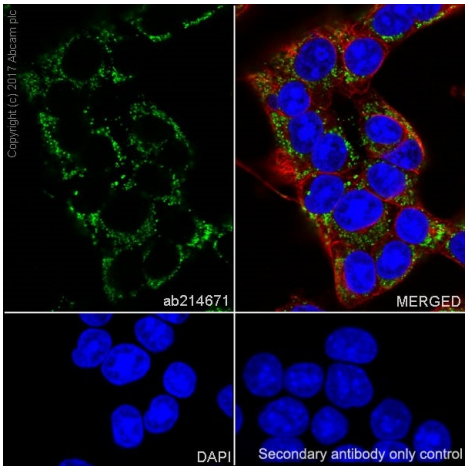


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NAGLU/NAG antibody [EPR20708] (ab214671)

Immunohistochemical analysis of paraffin-embedded rat kidney tissue labeling NAGLU/NAG with ab214671 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Granular cytoplasmic staining on rat kidney tubules (PMID: 4291567, PMID: 24244710). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

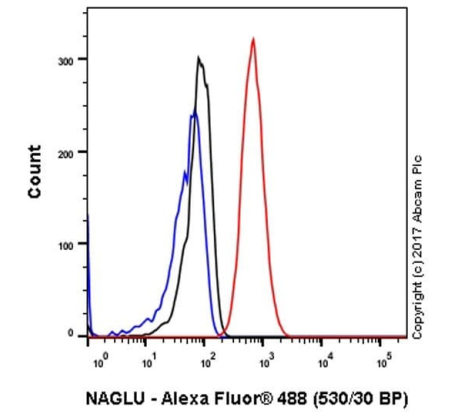


Immunocytochemistry/ Immunofluorescence - Anti-NAGLU/NAG antibody [EPR20708] (ab214671)

Immunofluorescent analysis of 100% methanol-fixed Hepa1-6 (mouse hepatoma epithelial cell line) cells labeling NAGLU/NAG with ab214671 at 1/100 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on Hepa1-6 cell line.

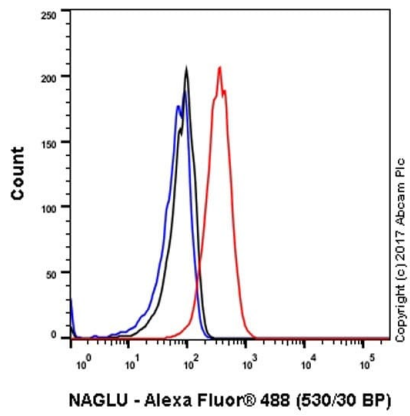
The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-NAGLU/NAG antibody [EPR20708] (ab214671)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed Hepa1-6 (mouse hepatoma epithelial cell line) cell line labeling NAGLU/NAG with ab214671at 1/50 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.



Flow Cytometry (Intracellular) - Anti-NAGLU/NAG antibody [EPR20708] (ab214671)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HepG2 (human liver hepatocellular carcinoma cell line) cell line labeling NAGLU/NAG with ab214671at 1/50 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.

Anti-NAGLU/NAG antibody [EPR20708] (ab214671)

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