

Product datasheet

Anti-NAGLU/NAG antibody [EPR20708] - BSA and Azide free ab251547

Recombinant RabMAb

11 Images

Overview

Product name	Anti-NAGLU/NAG antibody [EPR20708] - BSA and Azide free
Description	Rabbit monoclonal [EPR20708] to NAGLU/NAG - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	<p>This product was produced with the following immunogens:</p> <p>Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.</p> <p>Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.</p>
General notes	<p>ab251547 is the carrier-free version of ab214671.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20708
Isotype	IgG

Applications

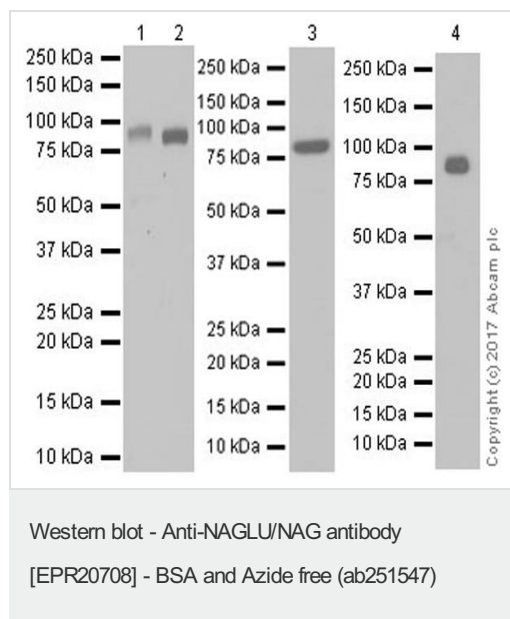
The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab251547 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. 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.
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.
ICC		Use at an assay dependent concentration.

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.

Images



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.

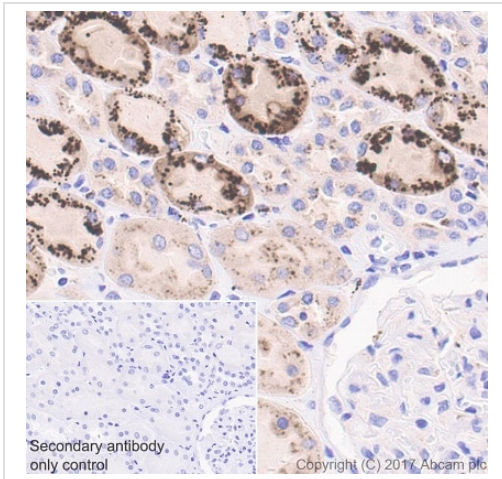
Predicted band size: 82 kDa

Observed band size: 82 kDa

This data was developed using [ab214671](#), the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFD/MBST.

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



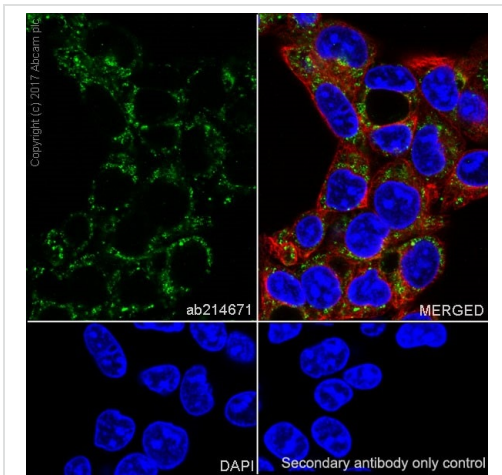
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NAGLU/NAG antibody [EPR20708] - BSA and Azide free (ab251547)

This data was developed using [ab214671](#), the same antibody clone in a different buffer formulation.

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.

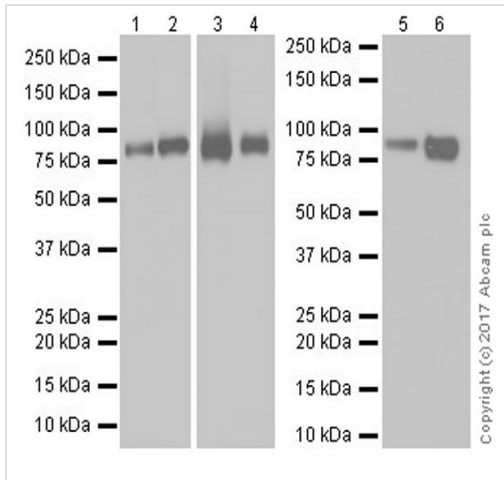


Immunocytochemistry - Anti-NAGLU/NAG antibody [EPR20708] - BSA and Azide free (ab251547)

This data was developed using [ab214671](#), the same antibody clone in a different buffer formulation.

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] - BSA and Azide free (ab251547)

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.

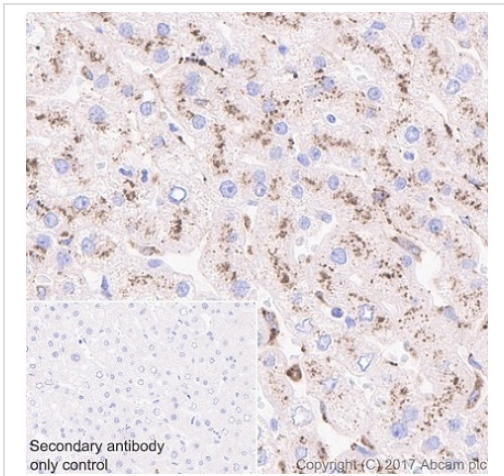
Predicted band size: 82 kDa

Observed band size: 82 kDa

This data was developed using [ab214671](#), the same antibody clone
in a different buffer formulation.

Blocking and dilution buffer: 5% NFDm/TBST.

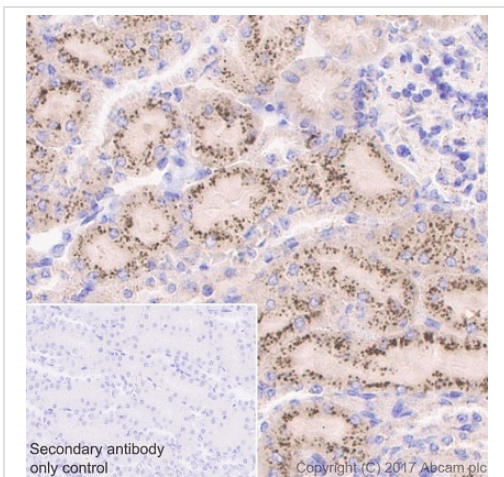
Exposure times: Lanes 1-2, 5-6: 3 minutes; Lanes 3-4: 30
seconds.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NAGLU/NAG antibody [EPR20708] - BSA and Azide free (ab251547)

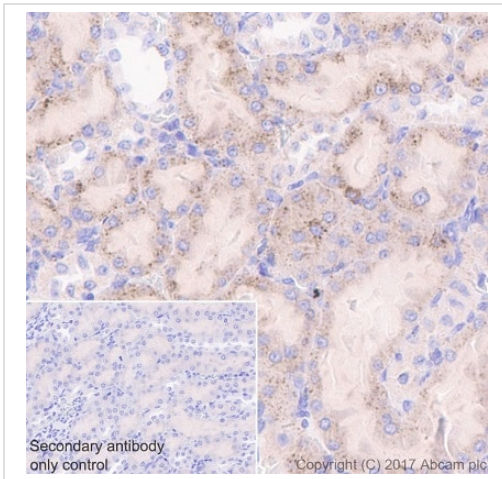
This data was developed using [ab214671](#), the same antibody clone in a different buffer formulation.

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.



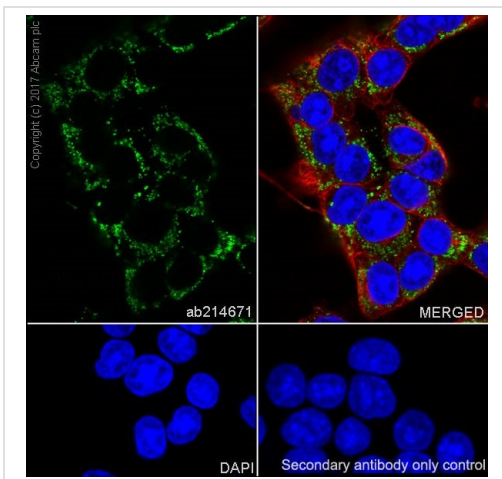
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This data was developed using [ab214671](#), the same antibody clone in a different buffer formulation. Immunohistochemical analysis of paraffin-embedded mouse kidney tissue labeling NAGLU/NAG with [ab214671](#) at 1/4000 dilution, followed by Goat 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.



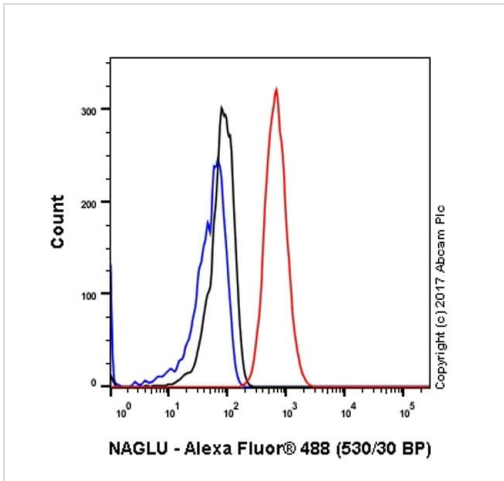
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NAGLU/NAG antibody [EPR20708] - BSA and Azide free (ab251547)

This data was developed using [ab214671](#), the same antibody clone in a different buffer formulation. 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 - Anti-NAGLU/NAG antibody [EPR20708] - BSA and Azide free (ab251547)

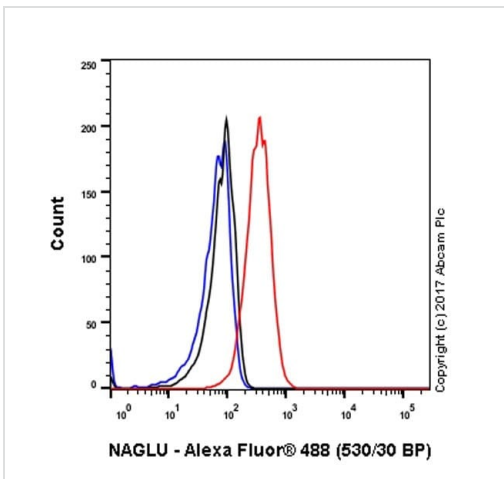
This data was developed using [ab214671](#), the same antibody clone in a different buffer formulation. Immunofluorescent analysis of 100% methanol-fixed Hepa1-6 (mouse hepatoma epithelial cell line) cells labeling NAGLU/NAG with [ab214671](#) at 1/100 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa 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] - BSA and Azide free (ab251547)

This data was developed using [ab214671](#), the same antibody clone in a different buffer formulation.

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed Hepa1-6 (mouse hepatoma epithelial cell line) cell line labeling NAGLU/NAG with [ab214671](#) at 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] - BSA and Azide free (ab251547)

This data was developed using [ab214671](#), the same antibody clone in a different buffer formulation.

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HepG2 (human liver hepatocellular carcinoma cell line) cell line labeling NAGLU/NAG with [ab214671](#) at 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.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-NAGLU/NAG antibody [EPR20708] - BSA and Azide free (ab251547)

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