

## Product datasheet

### Anti-GNS antibody [EPR8329(2)] ab154177

KO VALIDATED Recombinant RabMAb

3 Images

#### Overview

Product name	Anti-GNS antibody [EPR8329(2)]
Description	Rabbit monoclonal [EPR8329(2)] to GNS
Host species	Rabbit
Tested applications	<b>Suitable for:</b> WB <b>Unsuitable for:</b> Flow Cyt, ICC/IF or IHC-P
Species reactivity	<b>Reacts with:</b> Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa, PC3, NCI-H460 and 293T cell lysates.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

#### Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal

**Clone number**                      EPR8329(2)

**Isotype**                                IgG

## Applications

**The Abpromise guarantee**            Our **Abpromise guarantee** covers the use of ab154177 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
WB		1/10000 - 1/50000. Predicted molecular weight: 62 kDa.

**Application notes**                      Is unsuitable for Flow Cyt, ICC/IF or IHC-P.

## Target

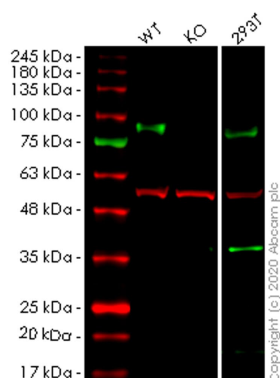
**Involvement in disease**                Defects in GNS are the cause of mucopolysaccharidosis type 3D (MPS3D) [MIM:252940]; also known as Sanfilippo D syndrome. MPS3D is a form of mucopolysaccharidosis type 3, an autosomal recessive lysosomal storage disease due to impaired degradation of heparan sulfate. 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.

**Sequence similarities**                      Belongs to the sulfatase family.

**Post-translational modifications**        The form A (78 kDa) is processed by internal peptidase cleavage to a 32 kDa N-terminal species (form B) and a 48 kDa C-terminal species.  
The conversion to 3-oxoalanine (also known as C-formylglycine, FGly), of a serine or cysteine residue in prokaryotes and of a cysteine residue in eukaryotes, is critical for catalytic activity.

**Cellular localization**                      Lysosome.

## Images



Western blot - Anti-GNS antibody [EPR8329(2)]  
(ab154177)

**All lanes** : Anti-GNS antibody [EPR8329(2)] (ab154177) at 1/1000 dilution

**Lane 1** : Wild-type HeLa cell lysate

**Lane 2** : GNS knockout HeLa cell lysate

**Lane 3** : 293T cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

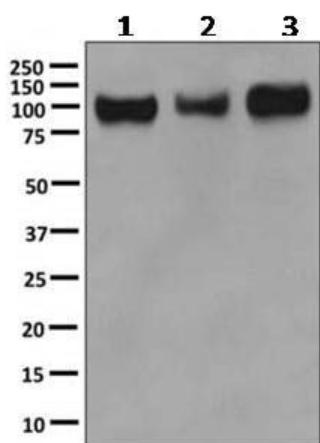
**All lanes** : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

**Predicted band size:** 62 kDa

**Observed band size:** 90 kDa

**Lanes 1-3:** Merged signal (red and green). Green - ab154177 observed at 90 kDa. Red - loading control [ab7291](#) observed at 50 kDa.

ab154177 Anti-GNS antibody [EPR8329(2)] was shown to specifically react with GNS in wild-type HeLa cells. Loss of signal was observed when knockout cell line [ab265495](#) (knockout cell lysate [ab257975](#)) was used. Wild-type and GNS knockout samples were subjected to SDS-PAGE. ab154177 and Anti-alpha Tubulin antibody [DM1A] - Loading Control ([ab7291](#)) 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.



Western blot - Anti-GNS antibody [EPR8329(2)]  
(ab154177)

**All lanes** : Anti-GNS antibody [EPR8329(2)] (ab154177) at  
1/10000 dilution

**Lane 1** : PC3 cell lysate

**Lane 2** : NCI-H460 cell lysate

**Lane 3** : 293T cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes** : Goat anti-rabbit HRP at 1/2000 dilution

**Predicted band size:** 62 kDa

#### 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-GNS antibody [EPR8329(2)] (ab154177)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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