

Product datasheet

Anti-AGL/Alpha-glucosidase antibody [EPR8880] ab133720

KO VALIDATED Recombinant RabMAb

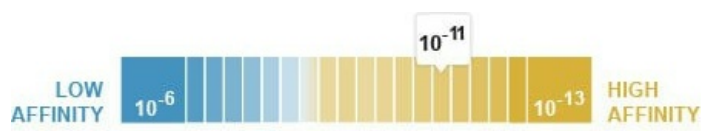
[2 References](#) [12 Images](#)

Overview

| | |
|---------------------|---|
| Product name | Anti-AGL/Alpha-glucosidase antibody [EPR8880] |
| Description | Rabbit monoclonal [EPR8880] to AGL/Alpha-glucosidase |
| Host species | Rabbit |
| Specificity | The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat. |
| Tested applications | Suitable for: ICC/IF, Flow Cyt (Intra), WB, IHC-P |
| Species reactivity | Reacts with: Mouse, Rat, Human |
| Immunogen | Synthetic peptide corresponding to Human AGL/Alpha-glucosidase aa 50-150. |
| Positive control | Human fetal muscle, mouse muscle, Human fetal heart, K562 and 293T cell lysates, Human liver tissue and Human muscle tissue, HeLa cells. |
| General notes | <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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle. Stable for 12 months at -20°C. |
| Dissociation constant (K _D) | K _D = 6.90 x 10 ⁻¹¹ M |



[Learn more about K_p](#)

| | |
|-----------------------|--|
| Storage buffer | pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 0.21% BSA, 59% PBS |
| Purity | Protein A purified |
| Clonality | Monoclonal |
| Clone number | EPR8880 |
| Isotype | IgG |

Applications

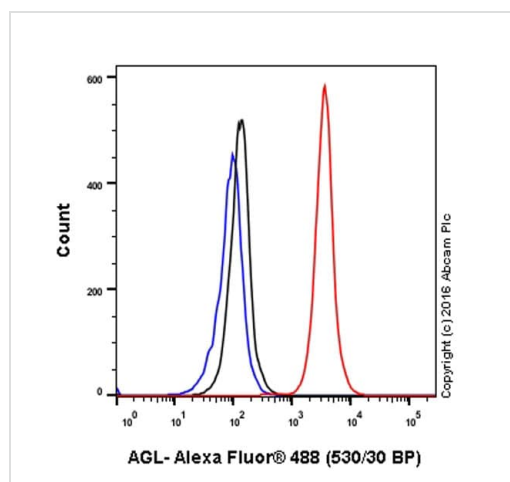
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab133720 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|------------------|-----------|---|
| ICC/IF | | 1/100 - 1/250. |
| Flow Cyt (Intra) | | 1/80. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. For unpurified use at 1/100-1/500. |
| WB | | 1/1000 - 1/10000. Predicted molecular weight: 175 kDa. |
| IHC-P | | 1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat. For unpurified use at 1/100 - 1/250. |

Target

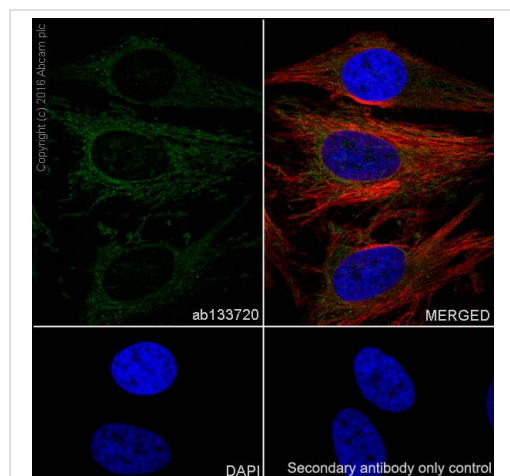
| | |
|---|---|
| Function | Multifunctional enzyme acting as 1,4-alpha-D-glucan:1,4-alpha-D-glucan 4-alpha-D-glycosyltransferase and amylo-1,6-glucosidase in glycogen degradation. |
| Tissue specificity | Liver, kidney and lymphoblastoid cells express predominantly isoform 1; whereas muscle and heart express not only isoform 1, but also muscle-specific isoform mRNAs (isoforms 2, 3 and 4). Isoforms 5 and 6 are present in both liver and muscle. |
| Involvement in disease | Glycogen storage disease 3 |
| Sequence similarities | Belongs to the glycogen debranching enzyme family. |
| Post-translational modifications | The N-terminus is blocked. Ubiquitinated. |
| Cellular localization | Cytoplasm. Under glycogenolytic conditions localizes to the nucleus. |

Images



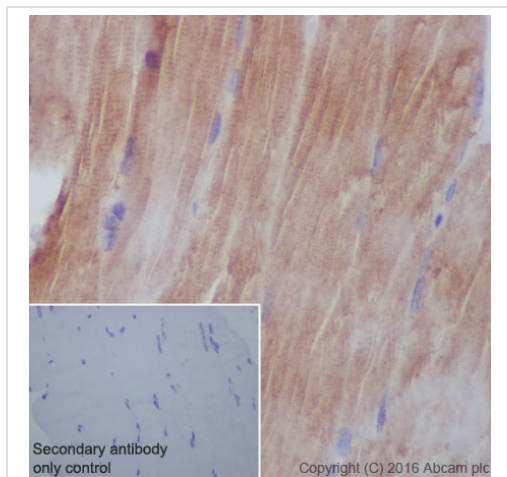
Flow Cytometry (Intracellular) - Anti-AGL/Alpha-glucosidase antibody [EPR8880] (ab133720)

Intracellular Flow Cytometry analysis of K-562 (Human chronic myelogenous leukemia lymphoblast) cells labeling AGL/Alpha-glucosidase with purified ab133720 at 1/80 dilution (10 µg/ml) (red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



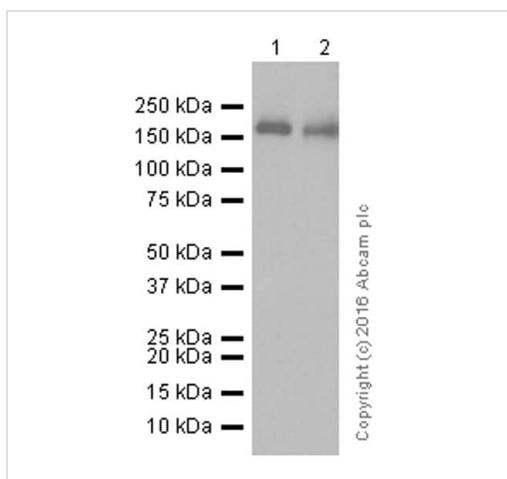
Immunocytochemistry/ Immunofluorescence - Anti-AGL/Alpha-glucosidase antibody [EPR8880] (ab133720)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling AGL/Alpha-glucosidase with Purified ab133720 at 1:100 dilution. Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200. **ab150077** Goat anti rabbit IgG(Alexa Fluor® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AGL/Alpha-glucosidase antibody [EPR8880] (ab133720)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human skeletal muscle tissue sections labeling AGL/Alpha-glucosidase with Purified ab133720 at 1:2000 dilution (0.4 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. **ab97051** Goat Anti-Rabbit IgG H&L (HRP) secondary antibody was used at 1:500 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-AGL/Alpha-glucosidase antibody [EPR8880] (ab133720)

All lanes : Anti-AGL/Alpha-glucosidase antibody [EPR8880] (ab133720) at 1/1000 dilution (purified)

Lane 1 : K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysates

Lane 2 : HEK-293 (Human embryonic kidney epithelial cell) whole cell lysates

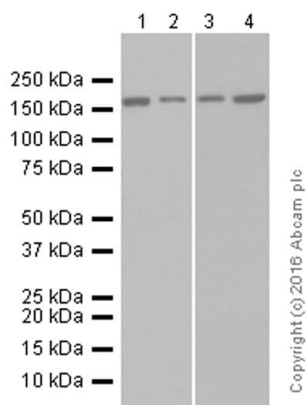
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

Predicted band size: 175 kDa

Blocking and diluting buffer: 5% NFDM/TBST



Western blot - Anti-AGL/Alpha-glucosidase antibody [EPR8880] (ab133720)

All lanes : Anti-AGL/Alpha-glucosidase antibody [EPR8880] (ab133720) at 1/5000 dilution (purified)

Lane 1 : Human fetal muscle lysates

Lane 2 : Human fetal heart lysates

Lane 3 : Mouse muscle lysates

Lane 4 : Rat muscle lysates

Lysates/proteins at 20 µg per lane.

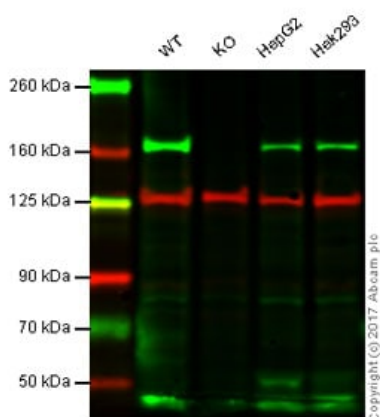
Secondary

All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

Predicted band size: 175 kDa

Observed band size: 175 kDa

Blocking and diluting buffer: 5% NFDM/TBST



Western blot - Anti-AGL/Alpha-glucosidase antibody [EPR8880] (ab133720)

Lane 1: Wild type HAP1 whole cell lysate (20 µg)

Lane 2: AGL/Alpha-glucosidase knockout HAP1 whole cell lysate (20 µg)

Lane 3: HepG2 whole cell lysate (20 µg)

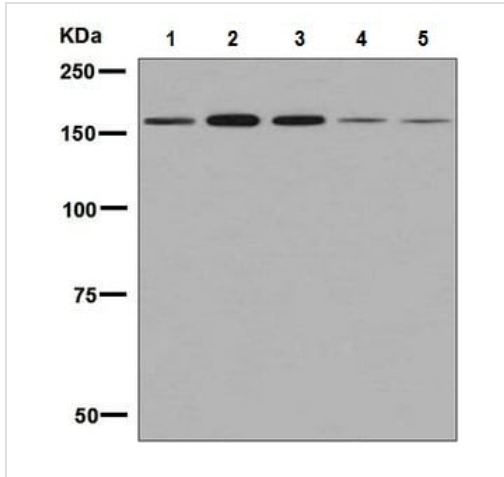
Lane 4: Hek293 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab133720 observed at 170 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

Unpurified ab133720 was shown to specifically react with AGL/Alpha-glucosidase when AGL/Alpha-glucosidase knockout samples were used. Wild-type and AGL/Alpha-glucosidase knockout samples were subjected to SDS-PAGE.

Unpurified Ab133720 and **ab18058** (Mouse anti Vinculin loading control) were incubated overnight at 4°C at 1/1000 dilution and

1/10000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed [ab216773](#) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed [ab216776](#) secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-AGL/Alpha-glucosidase antibody [EPR8880] (ab133720)

All lanes : Anti-AGL/Alpha-glucosidase antibody [EPR8880] (ab133720) at 1/1000 dilution (unpurified)

Lane 1 : Human fetal muscle lysate

Lane 2 : Mouse muscle lysate

Lane 3 : Human fetal heart lysate

Lane 4 : K562 cell lysate

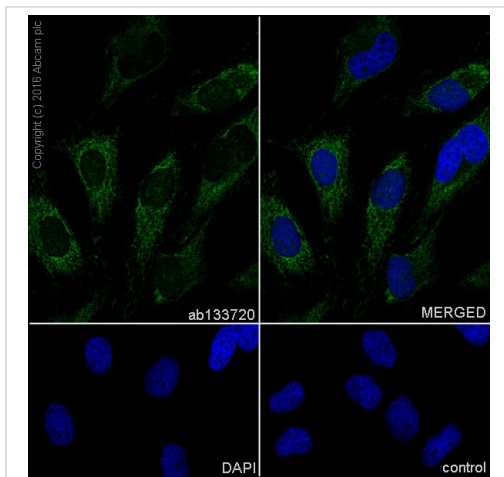
Lane 5 : 293T cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

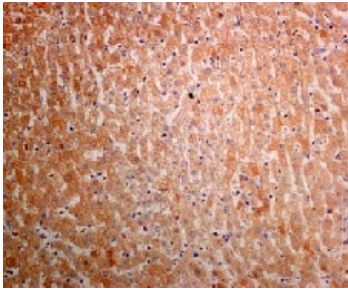
All lanes : HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 175 kDa



Immunocytochemistry/ Immunofluorescence - Anti-AGL/Alpha-glucosidase antibody [EPR8880] (ab133720)

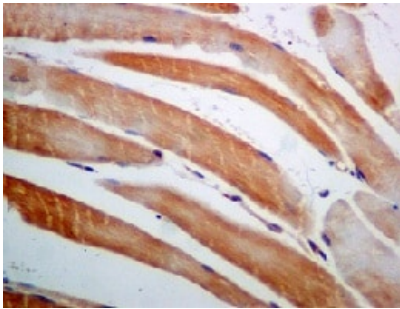
Immunocytochemistry/Immunofluorescence analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) labeling AGL/Alpha-glucosidase with purified ab133720 at 1/250 dilution. Cells were fixed with 4% PFA and permeabilized with 0.1% tritonX-100. [ab150077](#) Goat anti rabbit IgG (Alexa Fluor®488) at 1/1000 was used as the secondary antibody. Nuclei were counterstained with DAPI. PBS was used instead of the primary antibody as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AGL/Alpha-glucosidase antibody [EPR8880] (ab133720)

Immunohistochemical analysis of paraffin-embedded Human liver tissue labelled with unpurified ab133720 at 1/100 dilution.

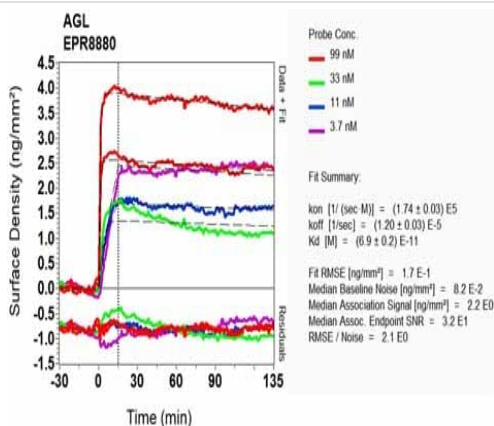
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AGL/Alpha-glucosidase antibody [EPR8880] (ab133720)

Immunohistochemical analysis of paraffin-embedded Human muscle tissue labelled with unpurified ab133720 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



OL-RD Scanning - Anti-AGL/Alpha-glucosidase antibody [EPR8880] (ab133720)

Equilibrium disassociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

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-AGL/Alpha-glucosidase antibody [EPR8880]
(ab133720)

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

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