abcam

Product datasheet

Anti-AGL/Alpha-glucosidase antibody [EPR8880] - BSA and Azide free ab230798

KO VALIDATED Recombinant RabMAb

9 Images

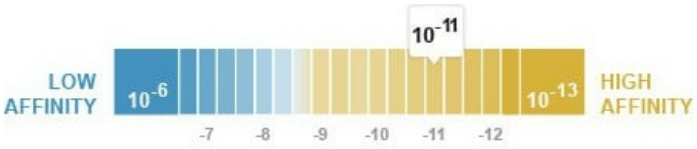
Overview

Product name	Anti-AGL/Alpha-glucosidase antibody [EPR8880] - BSA and Azide free
Description	Rabbit monoclonal [EPR8880] to AGL/Alpha-glucosidase - BSA and Azide free
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:** Flow Cyt (Intra), WB, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
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	ab230798 is the carrier-free version of **ab133720**. 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.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.

Dissociation constant (K_D)	$K_D = 6.90 \times 10^{-11}$ M



Learn more about K_D

Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR8880
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab230798 in the following tested applications.

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

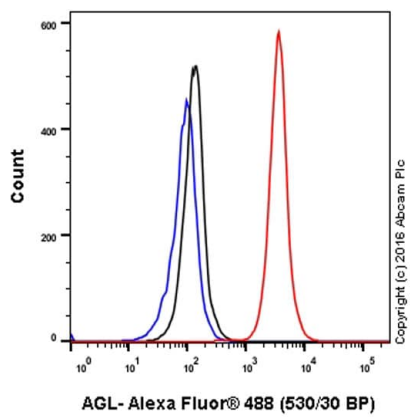
Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration. **ab199376** - Rabbit monoclonal IgG (Low endotoxin, Azide free), is suitable for use as an isotype control with this antibody.
WB		Use at an assay dependent concentration. Predicted molecular weight: 175 kDa.
IHC-P		Use at an assay dependent concentration. 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.
ICC/IF		Use at an assay dependent concentration.

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	The N-terminus is blocked.

modifications	Ubiquitinated.
Cellular localization	Cytoplasm. Under glycogenolytic conditions localizes to the nucleus.

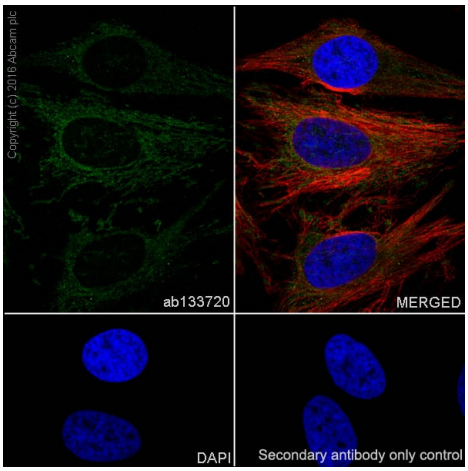
Images



Flow Cytometry (Intracellular) - Anti-AGL/Alpha-glucosidase antibody [EPR8880] - BSA and Azide free (ab230798)

Intracellular Flow Cytometry analysis of K-562 (Human chronic myelogenous leukemia lymphoblast) cells labeling AGL/Alpha-glucosidase with purified **ab133720** at 1/80 dilution (10ï¿½g/ml) (red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluorï¿½ 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).

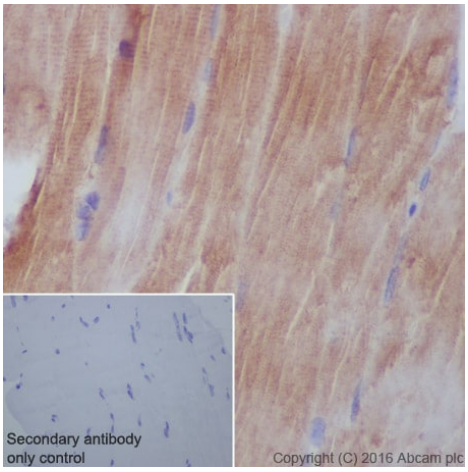
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab133720**).



Immunocytochemistry/ Immunofluorescence - Anti-AGL/Alpha-glucosidase antibody [EPR8880] - BSA and Azide free (ab230798)

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.

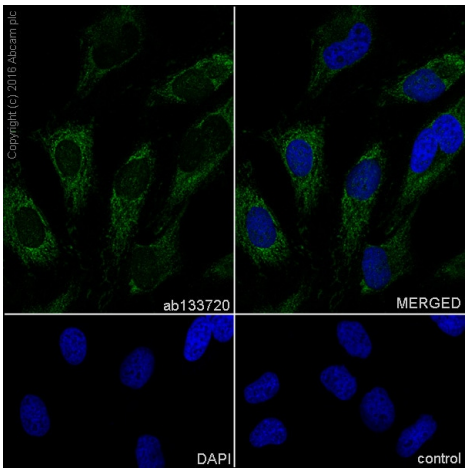
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab133720**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AGL/Alpha-glucosidase antibody [EPR8880] - BSA and Azide free (ab230798)

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.

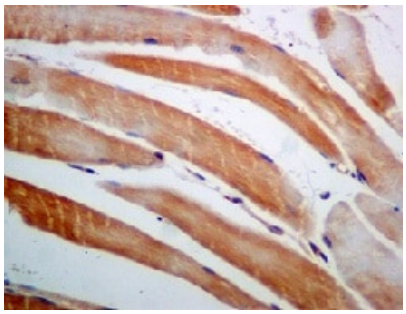
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab133720**).



Immunocytochemistry/ Immunofluorescence - Anti-AGL/Alpha-glucosidase antibody [EPR8880] - BSA and Azide free (ab230798)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab133720**).

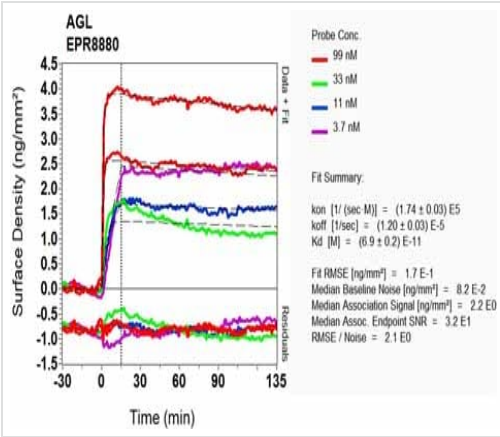


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AGL/Alpha-glucosidase antibody [EPR8880] - BSA and Azide free (ab230798)

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab133720**).

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.



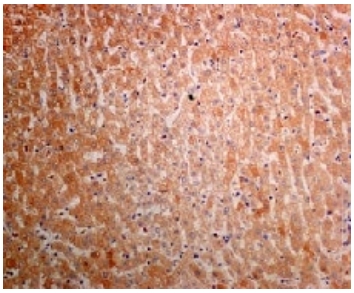
OI-RD Scanning - Anti-AGL/Alpha-glucosidase antibody [EPR8880] - BSA and Azide free (ab230798)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab133720**).

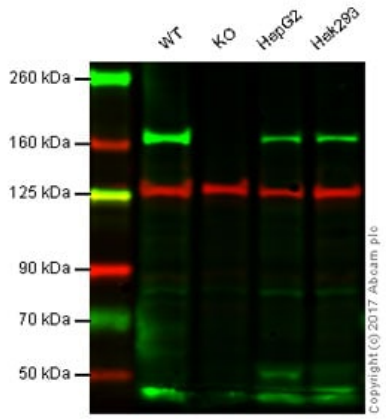


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AGL/Alpha-glucosidase antibody [EPR8880] - BSA and Azide free (ab230798)

This IHC data was generated using the same anti-AGL/Alpha-glucosidase antibody clone, EPR8880, in a different buffer formulation (cat# **ab133720**).

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

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.

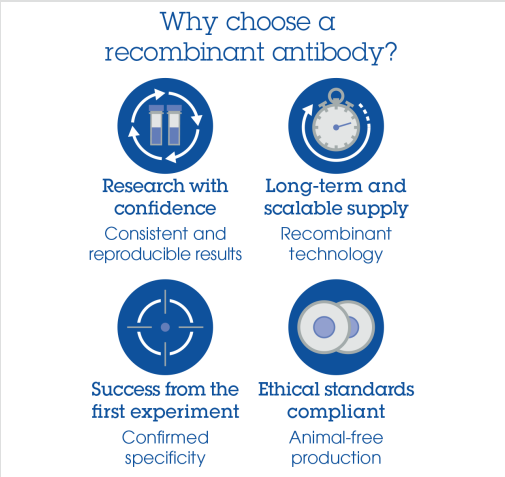


Western blot - Anti-AGL/Alpha-glucosidase antibody [EPR8880] - BSA and Azide free (ab230798)

This IHC data was generated using the same anti-AGL/Alpha-glucosidase antibody clone, EPR8880, in a different buffer formulation (cat# **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.



Anti-AGL/Alpha-glucosidase antibody [EPR8880] - BSA and Azide free (ab230798)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- 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

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors