abcam

Product datasheet

Anti-GBA antibody [EPR5143(3)] - BSA and Azide free ab215260

敲除验证 重组 RabMAb

9 图像

概述

产品名称	Anti-GBA抗体[EPR5143(3)] - BSA and Azide free
描述	兔单克隆抗体[EPR5143(3)] to GBA - BSA and Azide free
宿主	Rabbit
特异性	The lab re-tested the antibody in mouse samples without obtaining satisfactory results (tissue specific positive and negative results), therefore we are not able to guarantee the antibody in this species. Please contact our Scientific Support if you have any feedback in mouse.
经测试应用	**适用于:** WB, IHC-P **不适用于:** Flow Cyt or IP
种属反应性	**与反应:** Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: HeLa, MCF7, HepG2 and Hap1 cell lysates. IHC-P: Human kidney tissue and Human thyroid carcinoma tissue
常规说明	ab215260 is the carrier-free version of **ab128879**. 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. 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

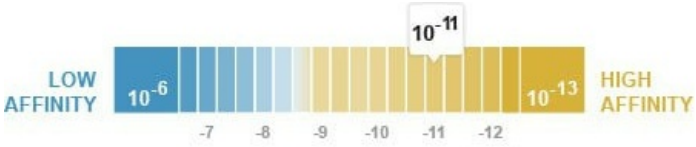
- Animal-free production

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**.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
解离常数 (K_D)	K_D = 2.28 x 10 $^{-11}$ M



Learn more about K_D

存储溶液	pH: 7.20 Constituent: PBS
无载体	**是**
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR5143(3)
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab215260于以下的经测试应用**

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use at an assay dependent concentration. Predicted molecular weight: 60 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.

应用说明 Is unsuitable for Flow Cyt or IP.

靶标

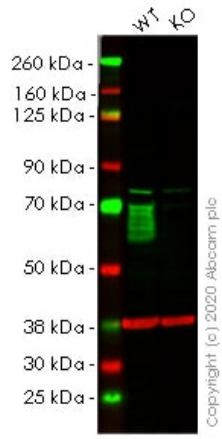
疾病相关 Defects in GBA are the cause of Gaucher disease (GD) [MIM:230800]; also known as glucocerebrosidase deficiency. GD is the most prevalent lysosomal storage disease, characterized by accumulation of glucosylceramide in the reticulo-endothelial system. Different clinical forms are recognized depending on the presence (neuronopathic forms) or absence of

central nervous system involvement, severity and age of onset.
Defects in GBA are the cause of Gaucher disease type 1 (GD1) [MIM:230800]; also known as adult non-neuronopathic Gaucher disease. GD1 is characterized by hepatosplenomegaly with consequent anemia and thrombopenia, and bone involvement. The central nervous system is not involved.
Defects in GBA are the cause of Gaucher disease type 2 (GD2) [MIM:230900]; also known as acute neuronopathic Gaucher disease. GD2 is the most severe form and is universally progressive and fatal. It manifests soon after birth, with death generally occurring before patients reach two years of age.
Defects in GBA are the cause of Gaucher disease type 3 (GD3) [MIM:231000]; also known as subacute neuronopathic Gaucher disease. GD3 has central nervous manifestations.
Defects in GBA are the cause of Gaucher disease type 3C (GD3C) [MIM:231005]; also known as pseudo-Gaucher disease or Gaucher-like disease.
Defects in GBA are the cause of Gaucher disease perinatal lethal (GDPL) [MIM:608013]. It is a distinct form of Gaucher disease type 2, characterized by fetal onset. Hydrops fetalis, in utero fetal death and neonatal distress are prominent features. When hydrops is absent, neurologic involvement begins in the first week and leads to death within 3 months. Hepatosplenomegaly is a major sign, and is associated with ichthyosis, arthrogryposis, and facial dysmorphism.
Note=Perinatal lethal Gaucher disease is associated with non-immune hydrops fetalis, a generalized edema of the fetus with fluid accumulation in the body cavities due to non-immune causes. Non-immune hydrops fetalis is not a diagnosis in itself but a symptom, a feature of many genetic disorders, and the end-stage of a wide variety of disorders.
Defects in GBA contribute to susceptibility to Parkinson disease (PARK) [MIM:168600]. A complex neurodegenerative disorder characterized by bradykinesia, resting tremor, muscular rigidity and postural instability. Additional features are characteristic postural abnormalities, dysautonomia, dystonic cramps, and dementia. The pathology of Parkinson disease involves the loss of dopaminergic neurons in the substantia nigra and the presence of Lewy bodies (intraneuronal accumulations of aggregated proteins), in surviving neurons in various areas of the brain. The disease is progressive and usually manifests after the age of 50 years, although early-onset cases (before 50 years) are known. The majority of the cases are sporadic suggesting a multifactorial etiology based on environmental and genetic factors. However, some patients present with a positive family history for the disease. Familial forms of the disease usually begin at earlier ages and are associated with atypical clinical features.

序列相似性 Belongs to the glycosyl hydrolase 30 family.

细胞定位 Lysosome membrane. Interaction with saposin-C promotes membrane association.

图片



Western blot - Anti-GBA antibody [EPR5143(3)] - BSA and Azide free (ab215260)

All lanes : Anti-GBA antibody [EPR5143(3)] (**ab128879**) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate
Lane 2 : GBA knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

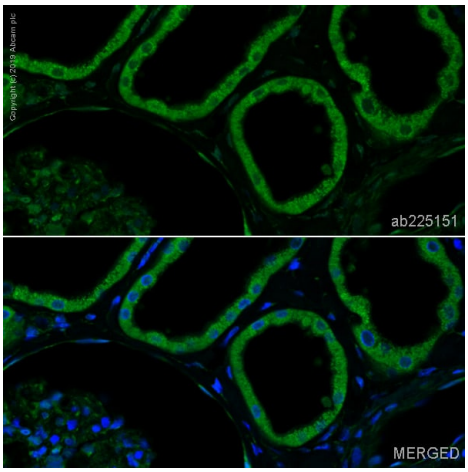
Performed under reducing conditions.

Predicted band size: 60 kDa
Observed band size: 60 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab128879**).

Lanes 1- 2: Merged signal (red and green). Green - **ab128879** observed at 60 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) observed at 37 kDa.

ab128879 was shown to react with GBA in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line **ab265038** (knockout cell lysate **ab256929**) was used. Wild-type HeLa and GBA knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. **ab128879** and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) overnight at 4°C at a 1 in 1000 dilution and a 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.

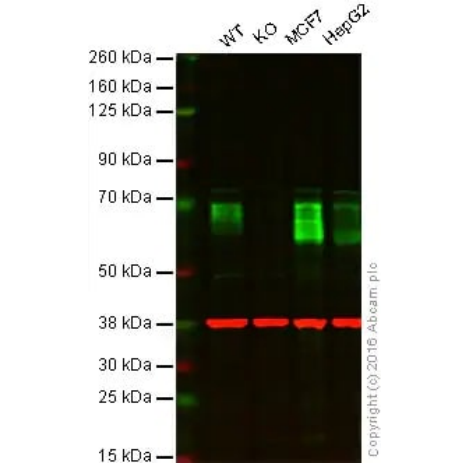


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GBA antibody [EPR5143(3)] - BSA and Azide free (ab215260)

Clone EPR5143(3) (ab215260) has been successfully conjugated by Abcam. This image was generated using Anti-GBA antibody [EPR5143(3)] (Alexa Fluor® 488). Please refer to **ab225151** for protocol details.

IHC image of GBA staining in a section of formalin-fixed paraffin-embedded normal Human Kidney*. The section was pre-treated using heat mediated antigen retrieval with Tris/EDTA buffer (pH9, epitope retrieval solution 2) for 20mins, performed on a Leica BOND™. Non-specific protein-protein interactions were then blocked in TBS containing 0.025% (v/v) Triton X-100, 0.3M (w/v) glycine and 1% (w/v) BSA for 1h at room temperature. The section was then incubated overnight at +4°C in TBS containing 0.025% (v/v) Triton X-100 and 1% (w/v) BSA with **ab225151** at 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue). The section was then mounted using Fluoromount®. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). For other IHC staining systems (automated and non-automated), customers should optimize variable parameters such as antigen retrieval conditions, antibody concentrations and incubation times.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre.



Western blot - Anti-GBA antibody [EPR5143(3)] - BSA and Azide free (ab215260)

All lanes : Anti-GBA antibody [EPR5143(3)] (**ab128879**) at 1/1000 dilution

Lane 1 : Wild-type HAP1 whole cell lysate
Lane 2 : GBA knockout HAP1 whole cell lysate
Lane 3 : MCF7 whole cell lysate
Lane 4 : HepG2 whole cell lysate

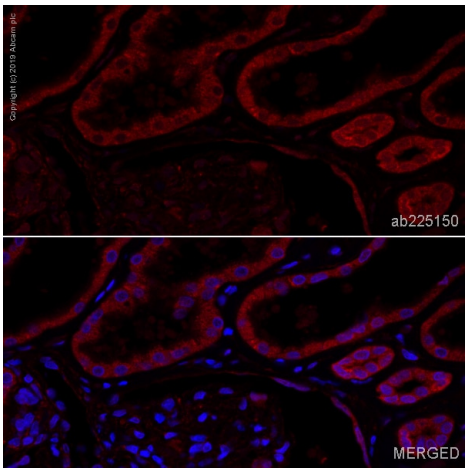
Lysates/proteins at 20 µg per lane.

Predicted band size: 60 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab128879**).

Lanes 1 - 4: Merged signal (red and green). Green - **ab128879** observed at 60 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab128879 was shown to specifically react with GBA in wild-type HAP1 cells as well as additional cross reactive bands. No bands were observed when GBA knockout samples were used. Wild-type and GBA knockout samples were subjected to SDS-PAGE. Ab128879 and **ab8245** (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10,000 dilution respectively. Blots were developed with 800CW Goat anti-Rabbit and 680CW Goat anti-Mouse secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.

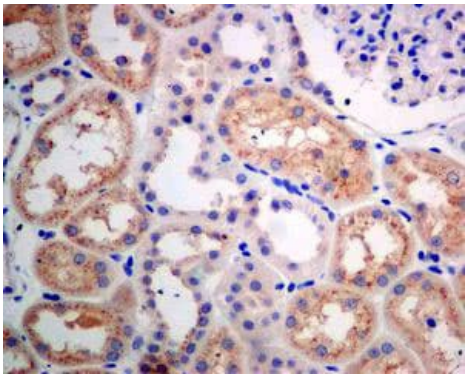


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GBA antibody [EPR5143(3)] - BSA and Azide free (ab215260)

Clone EPR5143(3) (ab215260) has been successfully conjugated by Abcam. This image was generated using Anti-GBA antibody [EPR5143(3)] (Alexa Fluor® 647). Please refer to **ab225150** for protocol details.

IHC image of GBA staining in a section of formalin-fixed paraffin-embedded normal Human Kidney*. The section was pre-treated using heat mediated antigen retrieval with Tris/EDTA buffer (pH9, epitope retrieval solution 2) for 20mins, performed on a Leica BOND™. Non-specific protein-protein interactions were then blocked in TBS containing 0.025% (v/v) Triton X-100, 0.3M (w/v) glycine and 1% (w/v) BSA for 1h at room temperature. The section was then incubated overnight at +4°C in TBS containing 0.025% (v/v) Triton X-100 and 1% (w/v) BSA with **ab225150** at 1/2500 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue). The section was then mounted using Fluoromount®. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). For other IHC staining systems (automated and non-automated), customers should optimize variable parameters such as antigen retrieval conditions, antibody concentrations and incubation times.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre.

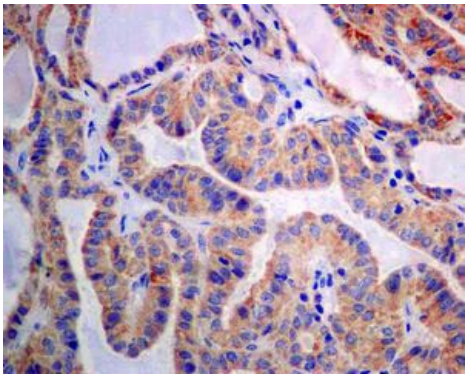


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GBA antibody [EPR5143(3)] - BSA and Azide free (ab215260)

ab128879, unpurified, at a 1/100 dilution, staining GBA in paraffin embedded Human kidney tissue by Immunohistochemistry.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab128879**).

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

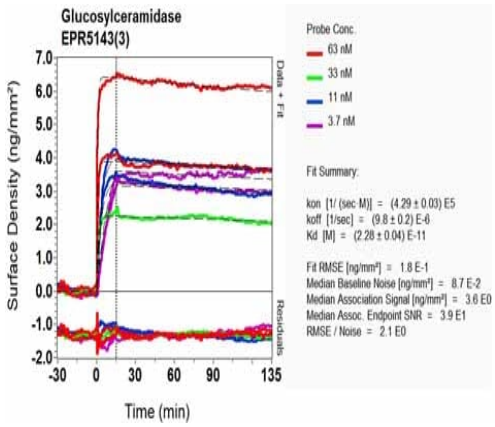


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GBA antibody [EPR5143(3)] - BSA and Azide free (ab215260)

ab128879, unpurified, at a 1/100 dilution, staining GBA in paraffin embedded Human thyroid carcinoma tissue by Immunohistochemistry.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab128879**).

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



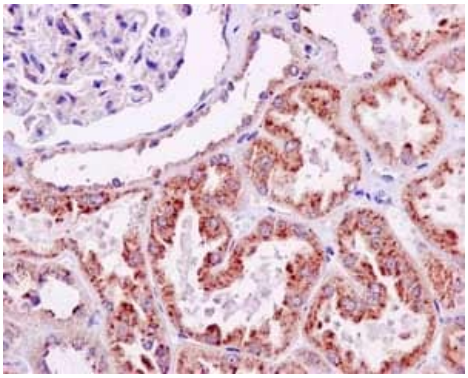
OI-RD Scanning - Anti-GBA antibody [EPR5143(3)] - BSA and Azide free (ab215260)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D

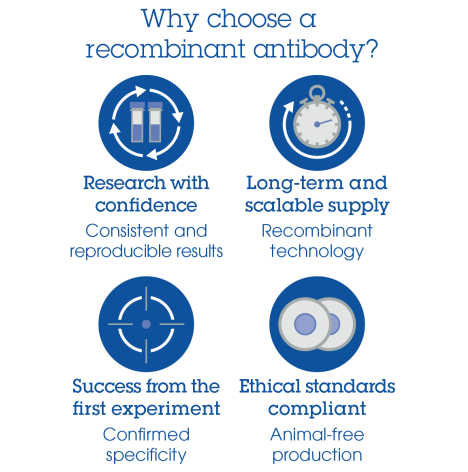
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab128879**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GBA antibody [EPR5143(3)] - BSA and Azide free (ab215260)

ab128879 staining GBA in Human kidney tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed and paraffin-embedded, antigen retrieval was by heat mediation in Tris/EDTA buffer pH9. Samples were incubated with primary antibody (1/200). An undiluted HRP-conjugated anti-rabbit IgG was used as the secondary antibody. Tissue counterstained with Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab128879**).



Anti-GBA antibody [EPR5143(3)] - BSA and Azide free (ab215260)

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