abcam

Product datasheet

Anti-Langerin antibody [EPR15863] - BSA and Azide free ab232603



3 Images

Overview

Product name Anti-Langerin antibody [EPR15863] - BSA and Azide free

Description Rabbit monoclonal [EPR15863] to Langerin - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: IHC-P **Species reactivity** Reacts with: Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control IHC-P: Human skin tissue.

General notes ab232603 is the carrier-free version of ab192027.

> 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 cellbased 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**.

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 EPR15863

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab232603 in the following tested applications.

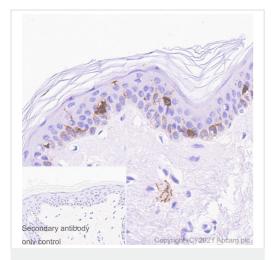
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
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.

Target

Function	Calcium-dependent lectin displaying mannose-binding specificity. Induces the formation of Birbeck granules (BGs); is a potent regulator of membrane superimposition and zippering. Binds to sulfated as well as mannosylated glycans, keratan sulfate (KS) and beta-glucans. Facilitates uptake of antigens and is involved in the routing and/or processing of antigen for presentation to T cells. Major receptor on primary Langerhans cells for Candida species, Saccharomyces species, and Malassezia furfur. Protects against human immunodeficiency virus-1 (HIV-1) infection. Binds to high-mannose structures present on the envelope glycoprotein which is followed by subsequent targeting of the virus to the Birbeck granules leading to its rapid degradation.
Tissue specificity	Exclusively expressed by Langerhans cells. Expressed in astrocytoma and malignant ependymoma, but not in normal brain tissues.
Involvement in disease	Defects in CD207 are the cause of Birbeck granule deficiency (BIRGD) [MIM:613393]. It is a condition characterized by the absence of Birbeck granules in epidermal Langerhans cells. Despite the lack of Birbeck granules Langerhans cells are present in normal numbers and have normal morphologic characteristics and antigen-presenting capacity.
Sequence similarities	Contains 1 C-type lectin domain.
Domain	The C-type lectin domain mediates dual recognition of both sulfated and mannosylated glycans.
Cellular localization	Membrane. Found in Birbeck granules (BGs), which are organelles consisting of superimposed and zippered membranes.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Langerin antibody

[EPR15863] - BSA and Azide free (ab232603)

Immunohistochemical analysis of Paraffin-embedded sections of human skin tissue labelling Langerin with <u>ab192027</u> at 1/1000 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>). Positive staining on the Langerhans cells in the human skin is observed. Counter-stained with Hematoxylin.

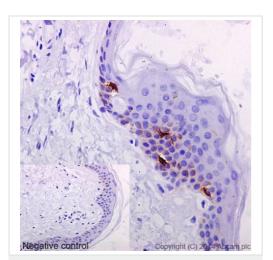
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>).

Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) for 20 minutes.

The section was incubated with <u>ab192027</u> for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

This data was developed using <u>ab192027</u>, the same antibody clone in a different buffer formulation.

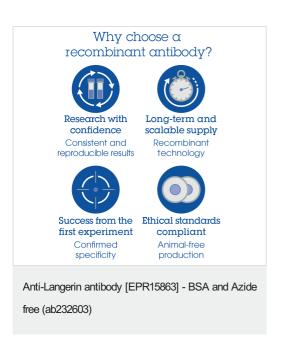


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Langerin antibody
[EPR15863] - BSA and Azide free (ab232603)

Immunohistochemical analysis of paraffin-embedded human skin tissue labeling Langerin with <u>ab192027</u> at 1/1000 dilution, followed by prediluted HRP Polymer for Rabbit/Mouse lgG. Counter stained with Hematoxylin. The negative control utilized PBS instead of primary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab192027</u>).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



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