abcam

Product datasheet

Anti-Islet 1 antibody [EPR10362] ab178400

KO 評価済 リコンピナント RabMAb

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製品の概要

製品名 Anti-Islet 1 antibody [EPR10362]

製品の詳細 Rabbit monoclonal [EPR10362] to Islet 1

由来種 Rabbit

特異性 In western blot, we observe a specific band at ~40kDa which is not seen in KO cell lines. A cross-

> reactive band was observed in the wild-type and knockout cells. The additional band below this band of interest is seen at ~38kDa in both the WT and KO cells. We are unsure as to the identity

of these extra bands.

アプリケーション 適用あり: IP, IHC-P, WB

適用なし: Flow Cyt or ICC/IF

種交差性 交差種: Human

非交差種: Mouse, Rat

免疫原 Recombinant fragment within Human Islet 1 aa 1 to the C-terminus. The exact sequence is

proprietary.

Database link: P61371

ポジティブ・コントロール WB: HeLa, K562, A431, A375, Jurkat and SH-SY5Y cell lysates. IHC-P: Human gastric

neuroendocrine carcinoma, pancreas and small cell lung carcinoma tissues. IP: SH-SY5Y cell

lysate.

特記事項 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**.

製品の特性

製品の状態 Liquid

保存方法 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.

パッファー Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol, 0.05% BSA

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 EPR10362

アイソタイプ lgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab178400の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IP		1/10 - 1/100.
IHC-P		1/6000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols. For unpurified use at 1/250 - 1/500
WB		1/1000 - 1/10000. Predicted molecular weight: 39 kDa.

追加情報 Is unsuitable for Flow Cyt or ICC/IF.

ターゲット情報

機能 Binds to one of the cis-acting domain of the insulin gene enhancer.

組織特異性 Expressed in subsets of neurons of the adrenal medulla and dorsal root ganglion, inner nuclear

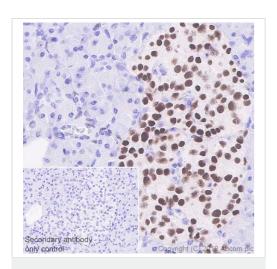
and ganglion cell layers in the retina, the pineal and some regions of the brain.

配列類似性 Contains 1 homeobox DNA-binding domain.

Contains 2 LIM zinc-binding domains.

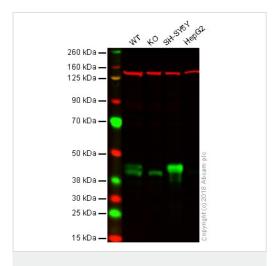
細胞内局在 Nucleus.

画像



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Islet 1 antibody
[EPR10362] (ab178400)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human pancreas tissue sections labeling Islet 1 with purified ab178400 at 1/6000 dilution (0.03 µg/ml). Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-Islet 1 antibody [EPR10362] (ab178400)

All lanes : Anti-Islet 1 antibody [EPR10362] (ab178400) at 1/1000 dilution

Lane 1: Wild-type HAP1 whole cell lysate

Lane 2: Islet 1 knockout HAP1 whole cell lysate

Lane 3: SH-SY5Y whole cell lysate

Lane 4: HepG2 whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 39 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab178400 observed at 40 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

Unpurified ab178400 was shown to recognize Islet 1 in wild-type HAP1 cells as signal was lost at the expected MW in Islet 1 knockout cells. Additional cross-reactive bands were observed in

the wild-type and knockout cells. Wild-type and Islet 1 knockout samples were subjected to SDS-PAGE. Ab178400 and <u>ab18058</u> (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/1,000 dilution and 1/20,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye[®] 800CW) preabsorbed <u>ab216773</u> and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preabsorbed <u>ab216776</u> secondary antibodies at 1/20,000 dilution for 1 hour at room temperature before imaging.

1 2
250 kDa —
150 kDa —
100 kDa —
75 kDa —
37 kDa —
25 kDa —
20 kDa —
15 kDa —
15 kDa —
10 kDa —

Western blot - Anti-Islet 1 antibody [EPR10362] (ab178400)

All lanes : Anti-Islet 1 antibody [EPR10362] (ab178400) at 1/10000 dilution (Purified)

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

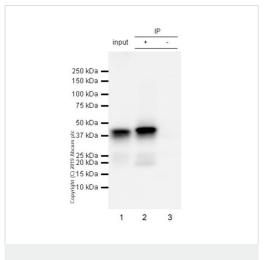
Lane 2: A431 (Human epidermoid carcinoma epithelial cell) whole cell lysates

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 39 kDa **Observed band size:** 39 kDa



Immunoprecipitation - Anti-Islet 1 antibody [EPR10362] (ab178400)

ab178400 (purified) at 1/20 dilution (1ug) immunoprecipitating lslet 1 in SH-SY5Y whole cell lysate.

Lane 1 (input): SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysate 10ug

Lane 2 (+): ab178400 & SH-SY5Y whole cell lysate

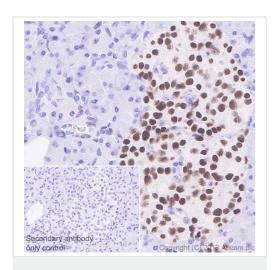
Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of

ab178400 in SH-SY5Y whole cell lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP)

(ab131366) was at 1/1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Islet 1 antibody
[EPR10362] (ab178400)

Immunohistochemical analysis of paraffin-embedded Human pancreas tissue labeling Islet 1 with ab178400 followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on human pancreatic islet. The section was incubated with ab229902 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).



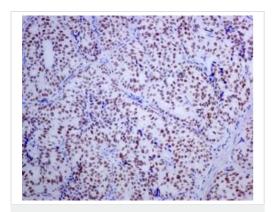
Western blot - Anti-Islet 1 antibody [EPR10362] (ab178400)

Anti-Islet 1 antibody [EPR10362] (ab178400) at 1/10000 dilution ((unpurified)) + A375 (HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates) whole cell lysates at 15 μg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

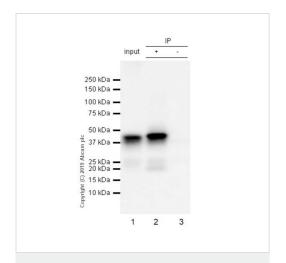
Predicted band size: 39 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Islet 1 antibody
[EPR10362] (ab178400)

Immunohistochemical analysis of formalin-fixed, paraffinembedded, human gastric neuroendocrine carcinoma tissue labeling Islet 1 with unpurified ab178400 at a 1/250 dilution.

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



Immunoprecipitation - Anti-Islet 1 antibody [EPR10362] (ab178400)

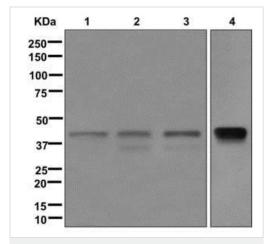
Islet 1 was immunoprecipitated from 0.35 mg SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysate 10 μ g with unpurifed ab178400 at 1:50 dilution (2 μ g in 0.35 mg lysates). Western blot was performed on the immunoprecipitate using unpurified ab178400 1:1000 dilution (2 μ g/ml). VeriBlot for IP Detection Reagent (HRP) (ab131366) was used as the secondary antibody at 1:1000 dilution.

Lane 1: SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysate 10µg

Lane 2: ab178400 IP in SH-SY5Y whole cell lysate

Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab178400 in SH-SY5Y whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST. Exposure time: 1 second



Western blot - Anti-Islet 1 antibody [EPR10362] (ab178400)

All lanes : Anti-Islet 1 antibody [EPR10362] (ab178400) at 1/1000 dilution ((unpurified))

Lane 1: HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate

Lane 2 : K562 (human chronic myelogenous leukemia cell line from bone marrow) cell lysate

Lane 3: Jurkat (human T cell leukemia cell line from peripheral blood) cell lysate

Lane 4: SH-SY5Y (human neuroblastoma cell line from bone marrow) cell lysate

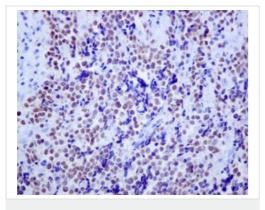
Lysates/proteins at 10 µg per lane.

Secondary

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

Developed using the ECL technique.

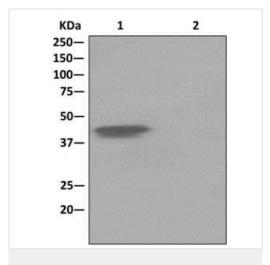
Predicted band size: 39 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Islet 1 antibody
[EPR10362] (ab178400)

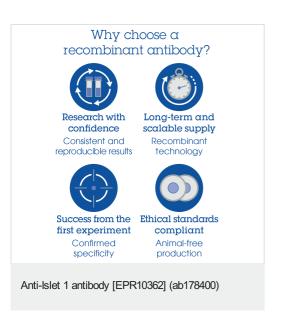
Immunohistochemical analysis of formalin-fixed, paraffinembedded, human small cell lung carcinoma tissue labeling Islet 1 with unpurified ab178400 at a 1/250 dilution.

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



Immunoprecipitation - Anti-Islet 1 antibody [EPR10362] (ab178400)

Western blot analysis on Immunoprecipitation pellet from either Lane 1) SH-SY5Y cell lysate, or Lane 2) 1xPBS (negative control); showing lslet 1, using unpurified ab178400 at 1/10 dilution and HRP-conjugated anti-rabbit lgG preferentially detecting the non-reduced form of rabbit lgG.



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