# abcam

#### Product datasheet

## Anti-Islet 1 antibody [EP4182] - Neural Stem Cell Marker ab109517

יעלאעבע RabMAb

★★★★★ 6 Abreviews 52 References 画像数 11

#### 製品の概要

製品名 Anti-Islet 1 antibody [EP4182] - Neural Stem Cell Marker

製品の詳細 Rabbit monoclonal [EP4182] to Islet 1 - Neural Stem Cell Marker

由来種 Rabbit

特異性 86% identities with Islet 2

アプリケーション 適用あり: ICC/IF, WB, IP, Flow Cyt (Intra)

種交差性 交差種: Mouse, Chicken, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: K562, HeLa, Jurkat and SH-SY5Y cell lysates. IHC-Fr: Chicken hindbrain tissue. ICC/IF: U-

87 MG cell line.

特記事項 Insulin gene enhancer protein ISL-1 is a protein encoded by the ISL1 gene. Among other roles,

ISL-1 plays a part in the embryogenesis of pancreatic islets of Langerhans and some models,

deficiency have shown failure of neural tube motor neurons to differentiate.

Rat: We have preliminary testing data to indicate this antibody may not react with these species.

Please contact us for more information.

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

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

**バッファー** pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 40% Glycerol, PBS, 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** EP4182

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ab109517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
ICC/IF	****(1)	1/250. <b>For unpurified use at 1/50 - 1/100.</b>
WB		1/10000 - 1/50000. Predicted molecular weight: 39 kDa.
IP		1/10 - 1/100.
Flow Cyt (Intra)		Use at an assay dependent concentration. <u>ab172730</u> - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.

#### 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

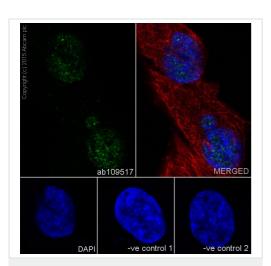
and ganglion cell layers in the retina, the pineal and some regions of the brain.

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

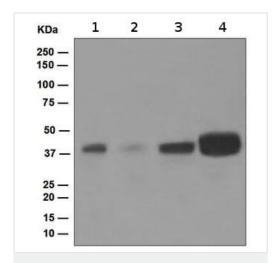
Contains 2 LIM zinc-binding domains.

細胞内局在 Nucleus.

#### 画像



Immunocytochemistry/ Immunofluorescence - Anti-Islet 1 antibody [EP4182] - Neural Stem Cell Marker (ab109517)



Western blot - Anti-Islet 1 antibody [EP4182] - Neural Stem Cell Marker (ab109517)

Immunocytochemistry/Immunofluorescence analysis of SH-SY-5Y (human neuroblastoma) cells labelling Islet 1 with purified ab109517 at 1/250. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. ab150077, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. ab7291, a mouse anti-tubulin (1/1000) and ab150120, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000) were also used.

**Control 1:** primary antibody (1/100) and secondary antibody, **ab150120**, an Alexa Fluor<sup>®</sup> 594-conjugated goat anti-mouse lgG (1/500).

Control 2: <u>ab7291</u> (1/1000) and secondary antibody, <u>ab150077</u>, an Alexa Fluor<sup>®</sup> 488-conjugated goat anti-rabbit IgG (1/500).

**All lanes :** Anti-Islet 1 antibody [EP4182] - Neural Stem Cell Marker (ab109517) at 1/10000 dilution (unpurified)

**Lane 1**: K562 (Human chronic myelogenous leukemia cell line from bone marrow) cell lysate

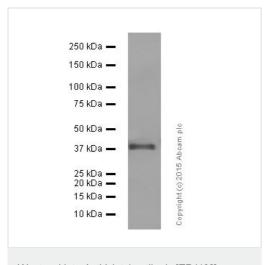
**Lane 2**: HeLa (Human epithelial cell line from cervix adenocarcinoma) cell lysate

**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.

Predicted band size: 39 kDa



Anti-Islet 1 antibody [EP4182] - Neural Stem Cell Marker (ab109517) at 1/50000 dilution (purified) + RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) cell lysate at 20 µg

#### **Secondary**

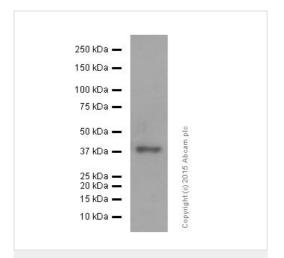
Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/50000 dilution (Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated)

Predicted band size: 39 kDa

Western blot - Anti-Islet 1 antibody [EP4182] -Neural Stem Cell Marker (ab109517)

Blocking/Dilution buffer and concentration: 5% NFDM/TBST.

Anti-Islet 1 antibody [EP4182] - Neural Stem Cell Marker (ab109517) at 1/10000 dilution (purified) + UMNSAH/DF-1 cell lysate at 20  $\mu g$ 



## Secondary

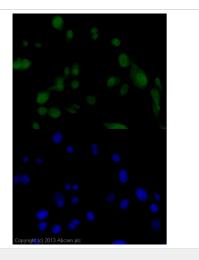
Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/50000 dilution (Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated)

Predicted band size: 39 kDa

Western blot - Anti-Islet 1 antibody [EP4182] - Neural Stem Cell Marker (ab109517)

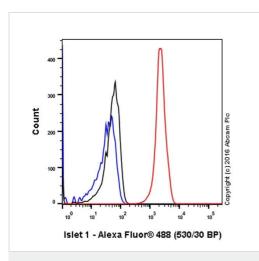
Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.



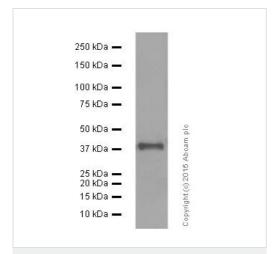
Immunocytochemistry/ Immunofluorescence - Anti-Islet 1 antibody [EP4182] - Neural Stem Cell Marker (ab109517)

Immunocytochemistry/Immunofluorescence analysis of U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) cells labeling Islet 1 with unpurified ab109517.



Flow Cytometry (Intracellular) - Anti-Islet 1 antibody [EP4182] - Neural Stem Cell Marker (ab109517)

Intracellular Flow Cytometry analysis of SH-SY5Y (human neuroblastoma) cells labeling Islet 1 with purified ab109517 at 1/50 dilution (10µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A Goat anti rabbit IgG (Alexa Fluorr  $^{(\!0\!)}$  488) (1/2000) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) was used as the unlabeled control.



Western blot - Anti-Islet 1 antibody [EP4182] - Neural Stem Cell Marker (ab109517)

Anti-Islet 1 antibody [EP4182] - Neural Stem Cell Marker (ab109517) at 1/50000 dilution (purified) + HeLa (Human epithelial cell line from cervix adenocarcinoma) cell lysate at 20  $\mu$ g

#### **Secondary**

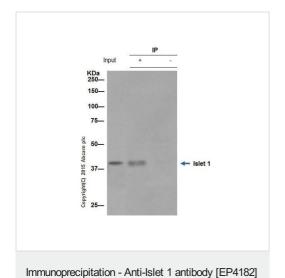
Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/50000 dilution (Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated)

Predicted band size: 39 kDa

Blocking/Dilution buffer and concentration: 5% NFDM/TBST.



Western blot - Anti-Islet 1 antibody [EP4182] - Neural Stem Cell Marker (ab109517)



- Neural Stem Cell Marker (ab109517)

Anti-Islet 1 antibody [EP4182] - Neural Stem Cell Marker (ab109517) at 1/50000 dilution (purified) + K562 (Human chronic myelogenous leukemia cell line from bone marrow) cell lysate at 20 µg

#### Secondary

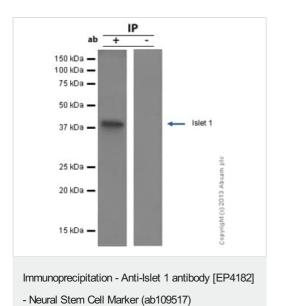
Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/50000 dilution (Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated)

Predicted band size: 39 kDa

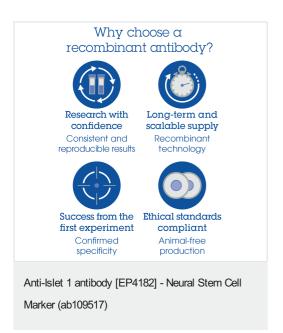
Blocking/Dilution buffer and concentration: 5% NFDM/TBST.

ab109517 (purified) at 1/30 immunoprecipitating Islet 1 in Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate. 10 µg of cell lysate was present in the input. For western blotting, a HRP-conjugated Veriblot for IP Detection Reagent (ab131366) (1/1,500) was used for detection. A rabbit monoclonal IgG (ab172730) was used intead of ab128913 as a negative control (Lane 3).

Blocking/Dilution buffer and concentration: 5% NFDM/TBST.



ab109517 (unpurified) immunoprecipitating Islet 1 in Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate.



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