# abcam

## Product datasheet

# Anti-Islet 1 antibody [1H9] ab86472



★★★★★ 1 Abreviews 17 References 画像数 6

#### 製品の概要

製品名 Anti-Islet 1 antibody [1H9]

製品の詳細 Mouse monoclonal [1H9] to Islet 1

由来種 Mouse

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: Flow Cyt, WB, IHC-P, ICC/IF

種交差性 交差種: Human, Recombinant fragment

免疫原 Recombinant fragment corresponding to Human Islet 1 aa 150-349. Purified recombinant

fragment of Human Islet 1 expressed in E. Coli

Database link: P61371

ポジティブ・コントロール Transfected HEK293 cell lysate. Human lung cancer tissue and cervical carcinoma tissue.

特記事項 This product was changed from ascites to supernatant. Lot no's high than GR141006-29 are from

Tissue Culture Supernatant

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

パッファー Preservative: 0.05% Sodium azide

Constituent: PBS

1

精製度 Protein G purified

特記事項(精製) Purified from tissue culture supernatant.

**ポリ/モノ** モノクローナル

**ウローン名** 1H9 **アイソタイプ** lgG1

### 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ab86472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
Flow Cyt		1/50 - 1/100.  ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
WB		1/500 - 1/2000. Predicted molecular weight: 39 kDa.
IHC-P		1/200 - 1/1000.
ICC/IF		1/200 - 1/1000.

# 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

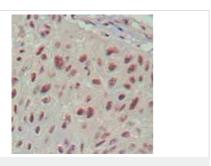
and ganglion cell layers in the retina, the pineal and some regions of the brain.

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

Contains 2 LIM zinc-binding domains.

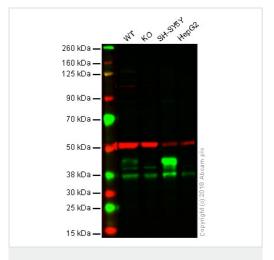
細胞内局在 Nucleus.

#### 画像



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Islet 1 antibody [1H9] (ab86472)

ab86472 at a 1/200 dilution staining Islet 1 in human lung cancer tissue. DAB staining shows nuclear localisation.



Western blot - Anti-Islet 1 antibody [1H9] (ab86472)

All lanes: Anti-Islet 1 antibody [1H9] (ab86472) at 1/500 dilution

Lane 1: Wild-type HAP1 whole cell lysate

Lane 2: ISL1 (Islet 1) knockout HAP1 whole cell lysate

Lane 3: SH-SY5Y whole cell lysate

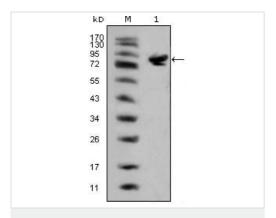
Lane 4: HepG2 whole cell lysate

Lysates/proteins at 20 µg per lane.

**Predicted band size:** 39 kDa **Observed band size:** 40 kDa

**Lanes 1 - 4:** Merged signal (red and green). Green - ab86472 observed at 40 kDa. Red - loading control, **ab176560**, observed at 50 kDa.

ab86472 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. ab86472 and <a href="mailto:ab176560">ab176560</a> (Rabbit antialpha Tubulin loading control) were incubated overnight at 4°C at 1/500 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed <a href="mailto:ab216772">ab216772</a> and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed <a href="mailto:ab216777">ab216777</a> secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

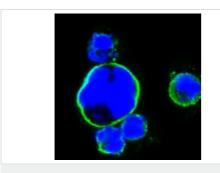


Western blot - Anti-Islet 1 antibody [1H9] (ab86472)

Anti-Islet 1 antibody [1H9] (ab86472) at 1/500 dilution + HEK293 cells transfected with full length Islet 1 (aa1-349)-hlgGFc

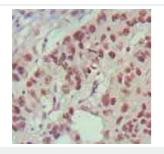
Predicted band size: 39 kDa

Note: The molecular weight is larger than expected, as the recombinant protein is not the endogenouse protein, but rather the fc-fusion protein



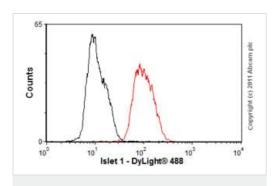
Immunocytochemistry/ Immunofluorescence - Anti-Islet 1 antibody [1H9] (ab86472)

Confocal immunofluorescence analysis of HEK293 cells trasfected with full-length Islet 1-hlgGFc using ab86472 at 1/150 dilution (green). Blue: DRAQ5 fluorescent DNA dye.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Islet 1 antibody [1H9] (ab86472)

ab86472 at a 1/200 dilution staining Islet 1 in human cervical carcinoma tissue. DAB staining shows nuclear localization.



Flow Cytometry - Anti-Islet 1 antibody [1H9] (ab86472)

Overlay histogram showing SH-SY5Y cells stained with ab86472 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab86472, 1/50 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive result in SH-SY5Y cells fixed with 4% paraformaldehyde (10 min)/permeabilized in 0.1% PBS-Tween for 20 min used under the same conditions.

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