abcam

Product datasheet

Anti-PER2 antibody [EPR11381(2)] ab179813

ועלשעבע RabMAb

★★★★★ 1 Abreviews 18 References 画像数7

製品の概要

製品名 Anti-PER2 antibody [EPR11381(2)]

製品の詳細 Rabbit monoclonal [EPR11381(2)] to PER2

由来種 Rabbit

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

適用なし: IHC-P

種交差性 交差種: 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: A673, Y79, HeLa and BxPC-3 cell lysates. ICC/IF: HeLa cells. Flow Cyt (intra): HeLa cells.

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**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

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.

Preservative: 0.01% Sodium azide バッファー

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 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 EPR11381(2)

アプリケーション

Abpromise保証は、次のテスト済みアプリケーションにおけるab179813の使用に適用されます The Abpromise guarantee 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 (Intra)		1/10 - 1/200. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/10000. Predicted molecular weight: 137 kDa.
ICC/IF	**** (1)	1/50 - 1/200.

追加情報

Is unsuitable for IHC-P.

ターゲット情報

機能	Component of the circadian clock mechanism which is essential for generating circadian rhythms.
	Negative element in the circadian transcriptional loop. Influences clock function by interacting with
	other circadian regulatory proteins and transporting them to the nucleus. Negatively regulates
	CLOCK
	NPAS2-BMAL1
	BMAL2-induced transactivation.
組織特異性	Widely expressed. Found in heart, brain, placenta, lung, liver, skeletal muscle, kidney and
	pancreas. High levels in skeletal muscle and pancreas. Low level in lung.
関連疾患	Defects in PER2 are a cause of familial advanced sleep-phase syndrome (FASPS)
	[MIM:604348]. FASPS is characterized by very early sleep onset and offset. Individuals are

'morning larks' with a 4 hours advance of the sleep, temperature and melatonin rhythms. Contains 1 PAC (PAS-associated C-terminal) domain. 配列類似性

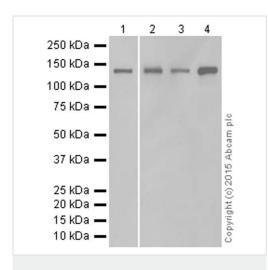
Contains 2 PAS (PER-ARNT-SIM) domains.

翻訳後修飾 Phosphorylated by CSNK1E and CSNK1D. Phosphorylation results in PER2 protein degradation. 細胞内局在 Nucleus. Cytoplasm. Mainly nuclear. Nucleocytoplasmic shuttling is effected by interaction with

other circadian core oscillator proteins and/or by phosphorylation. Retention of PER1 in the cytoplasm occurs through PER1-PER2 heterodimer formation or by interaction with CSNK1E and/or phosphorylation which appears to mask the PER nuclear localization signal. Also

translocated to the nucleus by CRY1 or CRY2.

画像



Western blot - Anti-PER2 antibody [EPR11381(2)] (ab179813)

All lanes : Anti-PER2 antibody [EPR11381(2)] (ab179813) at 1/5000 dilution (purified)

Lane 1 : HeLa whole cell lysate
Lane 2 : A673 whole cell lysate
Lane 3 : BxPC-3 whole cell lysate
Lane 4 : Y79 whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

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

Predicted band size: 137 kDa Observed band size: 140 kDa

ab179813 MERGED

DAPI -ve control 1 -ve control 2

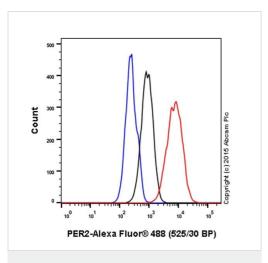
Immunocytochemistry/ Immunofluorescence - Anti-PER2 antibody [EPR11381(2)] (ab179813)

Blocking and dilution buffer: 5% NFDM/TBST.

Immunocytochemistry/Immunofluorescence analysis of HeLa cells labelling PER2 with purified ab179813 at a dilution of 1/200. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. $\underline{ab150077}$, an Alexa Fluor 488-conjugated goat antirabbit lgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. $\underline{ab7291}$, a mouse antitubulin (1/1000) and $\underline{ab150120}$, an Alexa Fluor 594-conjugated goat anti-mouse lgG (1/1000) were also used.

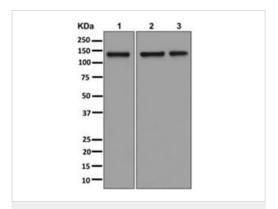
Control 1: primary antibody (1/200) and secondary antibody, **ab150120**, an Alexa Fluor[®] 594-conjugated goat anti-mouse IgG (1/1000).

Control 2: $\underline{ab7291}$ (1/1000) and secondary antibody, $\underline{ab150077}$, an Alexa Fluor $^{\circledR}$ 488-conjugated goat anti-rabbit lgG (1/1000).



Flow Cytometry (Intracellular) - Anti-PER2 antibody [EPR11381(2)] (ab179813)

Intracellular Flow Cytometry analysis of HeLa cells labelling PER2 with purified ab179813 at a dilution of1/200 (red). Cells were fixed with 4% paraformaldehyde. An Alexa Fluor[®] 488-conjugated goat anti-rabbit lgG (1/500) was used as the secondary antibody. Black - lsotype control, rabbit monoclonal lgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.



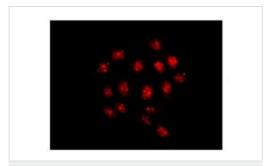
Western blot - Anti-PER2 antibody [EPR11381(2)] (ab179813)

All lanes : Anti-PER2 antibody [EPR11381(2)] (ab179813) at 1/1000 dilution (unpurified)

Lane 1 : A673 cell lysate
Lane 2 : HeLa cell lysate
Lane 3 : BxPC-3 cell lysate

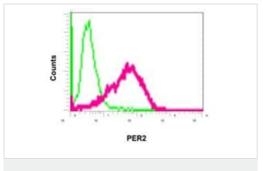
Lysates/proteins at 10 µg per lane.

Predicted band size: 137 kDa



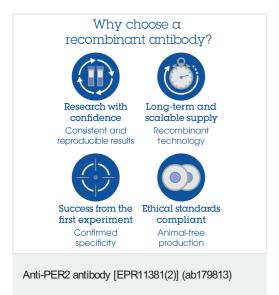
Immunocytochemistry/ Immunofluorescence - Anti-PER2 antibody [EPR11381(2)] (ab179813)

Immunocytochemistry/Immunofluorescence analysis of HeLa cells labeling PER2 with unpurified ab179813 at a dilution of 1/50.



Flow Cytometry (Intracellular) - Anti-PER2 antibody [EPR11381(2)] (ab179813)

Intracellular flow cytometric analysis of permeabilized HeLa cells labeling PER2 with unpurified ab179813 at a dilution of 1/10 (red)or a rabbit lgG (negative) (green).



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