# abcam

# Product datasheet

# Anti-beta 2 Adrenergic Receptor antibody [EPR707(N)] ab182136

יעלאעבע RabMAb

★★★★★ 5 Abreviews 50 References

画像数7

## 製品の概要

製品名 Anti-beta 2 Adrenergic Receptor antibody [EPR707(N)]

製品の詳細 Rabbit monoclonal [EPR707(N)] to beta 2 Adrenergic Receptor

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P, IHC-Fr

適用なし: Flow Cyt or ICC/IF

種交差性 交差種: Mouse, Rat, 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: Human fetal liver, Human skeletal muscle, Mouse heart, Rat heart, Mouse kidney, Rat kidney,

and A431 lysates; IHC-P: Rat stomach, Human stomach and Mouse cerebrum tissues; IHC-Fr:

Mouse stomach tissue section.

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

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: 40% Glycerol, PBS, 0.05% BSA

Protein A purified 精製度

ポリモノ モノクローナル

アイソタイプ

ΙgG

#### 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ab182136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
WB	★ ★ ★ ★ 🚖 (4)	1/1000 - 1/10000. Detects a band of approximately 68 kDa (predicted molecular weight: 46 kDa).
IHC-P		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. For lower background staining, perform heat mediated antigen retrieval with citrate buffer pH 6.  For unpurified use at 1/250.  See IHC antigen retrieval protocols.
IHC-Fr	**** <u>(1)</u>	1/100. Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20)

追加情報

Is unsuitable for Flow Cyt or ICC/IF.

# ターゲット情報

機能 Beta-adrenergic receptors mediate the catecholamine-induced activation of adenylate cyclase

through the action of G proteins. The beta-2-adrenergic receptor binds epinephrine with an

approximately 30-fold greater affinity than it does norepinephrine.

**配列類似性** Belongs to the G-protein coupled receptor 1 family. Adrenergic receptor subfamily. ADRB2 sub-

subfamily.

翻訳後修飾 Palmitoylated; may reduce accessibility of Ser-345 and Ser-346 by anchoring Cys-341 to the

plasma membrane. Agonist stimulation promotes depalmitoylation and further allows Ser-345 and

Ser-346 phosphorylation.

Phosphorylated by PKA and BARK upon agonist stimulation, which mediates homologous

desensitization of the receptor. PKA-mediated phosphorylation seems to facilitate

phosphorylation by BARK. Phosphorylated upon DNA damage, probably by ATM or ATR.

Phosphorylation of Tyr-141 is induced by insulin and leads to supersensitization of the receptor.

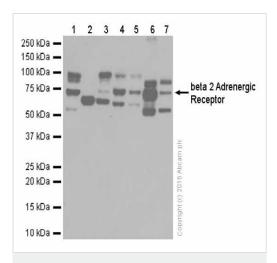
 $\label{thm:local_problem} \mbox{Ubiquitinated. Against-induced ubiquitination leads to sort internalized receptors to the lysosomes}$ 

for degradation. Deubiquitination by USP20 and USP33, leads to ADRB2 recycling and resensitization after prolonged agonist stimulation. USP20 and USP33 are constitutively

associated and are dissociated immediately after agonist stimulation.

細胞内局在 Cell membrane.

# 画像



Western blot - Anti-beta 2 Adrenergic Receptor antibody [EPR707(N)] (ab182136)

All lanes: Anti-beta 2 Adrenergic Receptor antibody [EPR707(N)] (ab182136) at 0.1 µg/ml (purified)

**Lane 1**: A431 ( Human epidermoid carcinoma epithelial cell) whole cell lysates

Lane 2: Human skeletal muscle lysates

Lane 3: Human fetal liver lysates

Lane 4: Mouse heart lysates

Lane 5: Rat heart lysates

Lane 6: Mouse kidney lysates

Lane 7: Rat kidney lysates

Lysates/proteins at 20 µg per lane.

# Secondary

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 46 kDa

Blocking and diluting buffer: 5% NFDM/TBST

The 50-90kda bands detected by ab182136 are consistent with many literatures, like PMID: 2836733, PMID: 17570158, PMID: 11701618, PMID: 2545714, PMID: 16708760. These bands have not been confirmed experimentally.

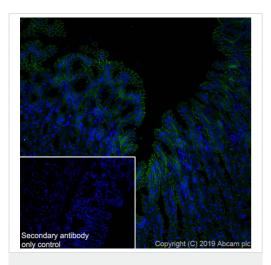


Immunohistochemistry (Frozen sections) - Anti-beta 2 Adrenergic Receptor antibody [EPR707(N)] (ab182136)

Secondary-only control

IHC image of beta 2 Adrenergic Receptor staining in a section of frozen human prostate carcinoma performed on a Leica BOND<sup>TM</sup> system using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with ab182136, 1/750 dilution, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



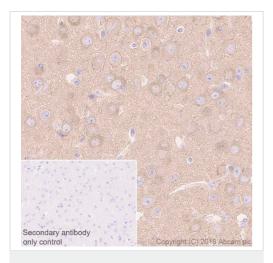
Immunohistochemistry (Frozen sections) - Anti-beta 2 Adrenergic Receptor antibody [EPR707(N)] (ab182136)

Immunohistochemistry (Frozen sections) analysis of mouse stomach tissue sections labeling beta 2 Adrenergic Receptor with Purified ab182136 at 1/100 (1.3  $\mu$ g/ml).Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). Goat anti rabbit lgG (Alexa Fluor<sup>®</sup> 488, **ab150077**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. DAPI was used as a counterstain.



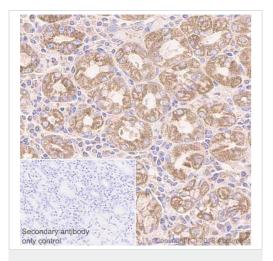
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-beta 2 Adrenergic
Receptor antibody [EPR707(N)] (ab182136)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat stomach tissue sections labeling beta 2 Adrenergic Receptor with Purified ab182136 at 1:100 dilution (1.28 µg/ml). Heat mediated antigen retrieval was performed 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.



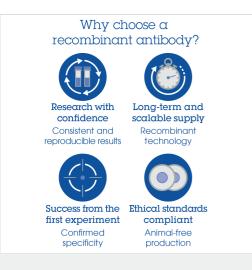
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-beta 2 Adrenergic
Receptor antibody [EPR707(N)] (ab182136)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse cerebrum tissue sections labeling beta 2 Adrenergic Receptor with Purified ab182136 at 1:100 dilution (1.28 μg/ml). Heat mediated antigen retrieval was performed 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.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-beta 2 Adrenergic
Receptor antibody [EPR707(N)] (ab182136)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human stomach tissue sections labeling beta 2 Adrenergic Receptor with Purified ab182136 at 1:100 dilution (1.28 µg/ml). Heat mediated antigen retrieval was performed 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.



Anti-beta 2 Adrenergic Receptor antibody [EPR707(N)] (ab182136)

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