# abcam

## Product datasheet

# Anti-Glucocorticoid Receptor antibody [BuGR2] ab2768

★★★★★ 4 Abreviews 46 References 画像数 8

製品の概要

製品名 Anti-Glucocorticoid Receptor antibody [BuGR2]

製品の詳細 Mouse monoclonal [BuGR2] to Glucocorticoid Receptor

由来種 Mouse

特異性 Immunocytochemical staining of GR in L929 cells with this antibody results in staining of both the

cytoplasm and nucleus, even in the presence of hormone. This antibody, using enzymatic digestion analysis, has been shown to react with the undigested 97 kDa GR, a 17 kDa DNA-binding trypsin fragment, and a 45 kDa steroid- and DNA-binding chymotrypsin fragment.

アプリケーション 適用あり: ICC/IF, Flow Cyt, WB

**種交差性 交差種:** Mouse, Rat, Human

非交差種: Bird, Non human primates, Amphibian

免疫原 Full length protein corresponding to Rat Glucocorticoid Receptor. Partially purified rat GR.

ポジティブ・コントロール ICC/IF: A549, HeLa, and U251 cells; Flow Cyt: Jurkat, HeLa, and NIH/3T3 cells; WB: Mouse liver

lysate.

特記事項

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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

**バッファー** pH: 7.20

Preservative: 0.05% Sodium azide

Constituent: PBS

精製度 Protein A purified

**ポリ/モノ** モノクローナル

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#### 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ab2768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   | **** <u>(1)</u> | 1/50 - 1/500.  |
| Flow Cyt |                 | Use 0.5-1µg for 10 <sup>6</sup> cells.  ab18414 - Mouse monoclonal lgG2a, is suitable for use as an isotype control with this antibody.  |
| WB       | ★ ★ ★ ★ ★ (2)   | Use a concentration of 5 µg/ml. Detects a band of approximately 97 kDa (predicted molecular weight: 86 kDa). Using enzymatic digestion analysis detects a band of approximately 97 kDa, a 17 kDa DNA-binding trypsin fragment, and a 45 kDa steroid- and DNA-binding chymotrypsin fragment (predicted molecular weight: 86 kDa). |

#### ターゲット情報

機能 Receptor for glucocorticoids (GC). Has a dual mode of action: as a transcription factor that binds

to glucocorticoid response elements (GRE) and as a modulator of other transcription factors.

Affects inflammatory responses, cellular proliferation and differentiation in target tissues. Could act as a coactivator for STAT5-dependent transcription upon growth hormone (GH) stimulation and could reveal an essential role of hepatic GR in the control of body growth. Involved in

chromatin remodeling. Plays a significant role in transactivation. Involved in nuclear translocation.

組織特異性 Widely expressed. In the heart, detected in left and right atria, left and right ventricles, aorta, apex,

intraventricular septum, and atrioventricular node as well as whole adult and fetal heart.

関連疾患 Defects in NR3C1 are a cause of glucocorticoid resistance (GCRES) [MIM:138040]; also known

as cortisol resistance. It is a hypertensive, hyperandrogenic disorder characterized by increased

serum cortisol concentrations. Inheritance is autosomal dominant.

配列類似性 Belongs to the nuclear hormone receptor family. NR3 subfamily.

Contains 1 nuclear receptor DNA-binding domain.

ドメイン Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-

terminal ligand-binding domain.

翻訳後修飾 Increased proteasome-mediated degradation in response to glucocorticoids.

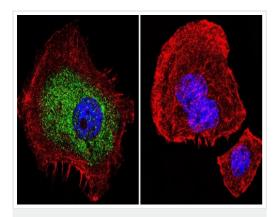
Phosphorylated in the absence of hormone; becomes hyperphosphorylated in the presence of glucocorticoid. The Ser-203-phosphorylated form is mainly cytoplasmic, and the Ser-211-phosphorylated form is nuclear. Transcriptional activity correlates with the amount of

phosphorylation at Ser-211.

Sumoylated; this reduces transcription transactivation.

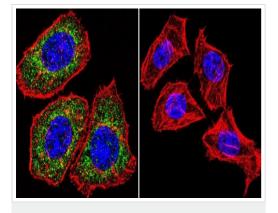
Ubiquitinated; restricts glucocorticoid-mediated transcriptional signaling.

#### 画像



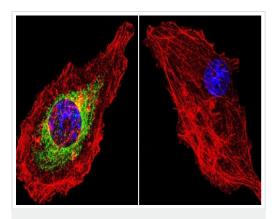
Immunocytochemistry/ Immunofluorescence - Anti-Glucocorticoid Receptor antibody [BuGR2] - ChIP Grade (ab2768)

Immunocytochemistry/Immunofluorescence analysis of Glucocorticoid Receptor shows staining in A549 cells. Glucocorticoid Receptor (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with ab2768 (1:100) over night at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. Images were taken at 60X magnification.



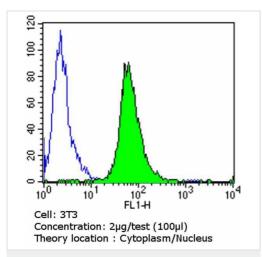
Immunocytochemistry/ Immunofluorescence - Anti-Glucocorticoid Receptor antibody [BuGR2] - ChIP Grade (ab2768)

Immunocytochemistry/Immunofluorescence analysis of Glucocorticoid Receptor shows staining in HeLa cells. Glucocorticoid Receptor (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with ab2768 (1:100) over night at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. Images were taken at 60X magnification.



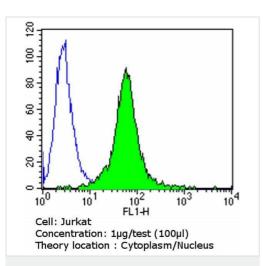
Immunocytochemistry/ Immunofluorescence - Anti-Glucocorticoid Receptor antibody [BuGR2] - ChIP Grade (ab2768)

Immunocytochemistry/Immunofluorescence analysis of Glucocorticoid Receptor shows staining in U251 cells. Glucocorticoid Receptor (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with ab2768 (1:100) over night at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. Images were taken at 60X magnification.



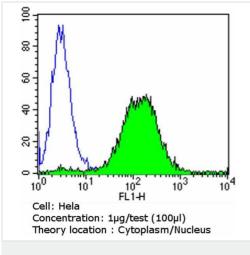
Flow Cytometry - Anti-Glucocorticoid Receptor antibody [BuGR2] - ChIP Grade (ab2768)

Flow cytometry analysis of Glucocorticoid Receptor showing positive staining in the nucleus and cytoplasm of NIH/3T3 cells compared to an isotype control (blue). Cells were harvested and adjusted to a concentration of 1-5x10^6 cells/ml. Cells were then fixed with 2% paraformaldehyde and washed with PBS. Cells were penetrated by dropping the supernatant and adding 90% methanol followed by incubation for 10 minutes at room temperature. Cells were blocked with a 2% solution of BSA-PBS for 30 min at room temperature and incubated with ab2768 at 2 ug/test for 60 min at room temperature. Cells were then incubated for 40 min at room temperature in the dark using a Dylight 488-conjugated goat antimouse lgG (H+L) secondary antibody and re-suspended in PBS for FACS analysis.

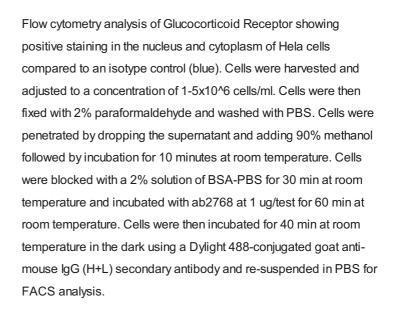


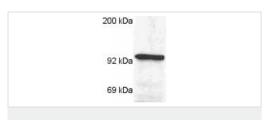
Flow Cytometry - Anti-Glucocorticoid Receptor antibody [BuGR2] - ChIP Grade (ab2768)

Flow cytometry analysis of Glucocorticoid Receptor showing positive staining in the nucleus and cytoplasm of Jurkat cells compared to an isotype control (blue). Cells were harvested and adjusted to a concentration of 1-5x10^6 cells/ml. Cells were then fixed with 2% paraformaldehyde and washed with PBS. Cells were penetrated by dropping the supernatant and adding 90% methanol followed by incubation for 10 minutes at room temperature. Cells were blocked with a 2% solution of BSA-PBS for 30 min at room temperature and then incubated with ab2768 at 1 ug/test for 60 min at room temperature. Cells were then incubated for 40 min at room temperature in the dark using a Dylight 488-conjugated goat antimouse IgG (H+L) secondary antibody and re-suspended in PBS for FACS analysis.



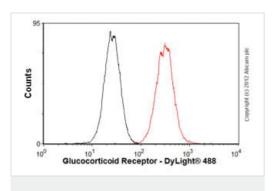
Flow Cytometry - Anti-Glucocorticoid Receptor antibody [BuGR2] - ChIP Grade (ab2768)





Western blot - Anti-Glucocorticoid Receptor antibody [BuGR2] - ChIP Grade (ab2768)

Western blot of glucocorticoid receptor on mouse liver extract using ab2768. Western blot of glucocorticoid receptor on mouse liver extract using ab2768.



Flow Cytometry - Anti-Glucocorticoid Receptor antibody [BuGR2] - ChIP Grade (ab2768)

Overlay histogram showing Jurkat cells stained with ab2768 (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 (ab2768, 0.5 $\mu$ g/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse lgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG2 (1 $\mu$ g/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in Jurkat cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

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