


# Anti-CRISPR-Cas9 antibody [KANI345B] - BSA and Azide free ab271303

リコンビナント

画像数 8

### 製品の概要

製品名	Anti-CRISPR-Cas9 antibody [KANI345B] - BSA and Azide free
製品の詳細	Rat monoclonal [KANI345B] to CRISPR-Cas9 - BSA and Azide free
由来種	Rat
アプリケーション	適用あり: WB, IHC-P, ICC
種交差性	<p>交差が予測される動物種: Streptococcus pyogenes </p>
免疫原	Recombinant full length protein. This information is considered to be commercially sensitive.
ポジティブ・コントロール	WB: HEK-293 transfected with CRISPR-Cas9 (Q99ZW2, Streptococcus pyogenes serotype M1) with GFP-Myc tag, whole cell lysate. IHC-P: HEK-293T transfected with a GFP-Myc-tagged CRISPR-associated endonuclease Cas9/Csn1 construct. ICC: HEK-293T cells transfected with GFP-tagged Cas9 expression vector.
特記事項	<p>ab271303 is the carrier-free version of <a href="#">ab271293</a>.</p> <p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact <a href="mailto:orders@abcam.com">orders@abcam.com</a>.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> </ul>

- Long-term security of supply  
- Animal-free production  
For more information [see here](#).

## 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C. Do Not Freeze.
バッファー	Constituent: 100% PBS
キャリア・フリー	はい
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	KANI345B
アイソタイプ	IgG2a

## アプリケーション

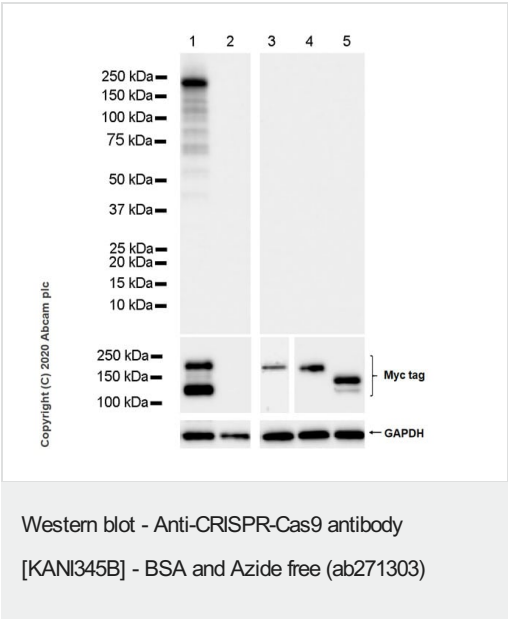
**The Abpromise guarantee**      **Abpromise保証は、**次のテスト済みアプリケーションにおけるab271303の使用に適用されます  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC		Use at an assay dependent concentration.

## ターゲット情報

**関連性**

[FUNCTION] CRISPR (clustered regularly interspaced short palindromic repeat) is an adaptive immune system that provides protection against mobile genetic elements (viruses, transposable elements and conjugative plasmids). CRISPR clusters contain spacers, sequences complementary to antecedent mobile elements, and target invading nucleic acids. CRISPR clusters are transcribed and processed into CRISPR RNA (crRNA) (Probable). In type II CRISPR systems correct processing of pre-crRNA requires a trans-encoded small RNA (tracrRNA), endogenous ribonuclease 3 (rnc) and this protein. The tracrRNA serves as a guide for ribonuclease 3-aided processing of pre-crRNA. Subsequently Cas9/crRNA/tracrRNA endonucleolytically cleaves linear or circular dsDNA target complementary to the spacer. The target strand not complementary to crRNA is first cut endonucleolytically, then trimmed by 3'-5' exonucleolytically. DNA-binding requires protein and both RNA species. Cas9 probably recognizes a short motif in the CRISPR repeat sequences (the PAM or protospacer adjacent motif) to help distinguish self versus nonself.



**All lanes :** Anti-CRISPR-Cas9 antibody [KANI345B] ([ab271293](#)) at 1/5000 dilution

**Lane 1 :** HEK-293 (human embryonic kidney epithelial cell) transfected with CRISPR-Cas9 (Q99ZW2, *Streptococcus pyogenes* serotype M1) with GFP-Myc tag, whole cell lysate

**Lane 2 :** HEK-293T transfected with an empty vector (vector control), containing a myc-His-tag®, whole cell lysate

**Lane 3 :** HEK-293 transfected with CRISPR-Cas9 (G3ECR1, *Streptococcus thermophilus*) with Myc-His tag, whole cell lysate

**Lane 4 :** HEK-293 transfected with CRISPR-Cas9 (Q03Jl6, *Streptococcus thermophilus*) with Myc-His tag, whole cell lysate

**Lane 5 :** HEK-293 transfected with CRISPR-Cas9 (J7RUA5, *Staphylococcus aureus* subsp. *aureus*) with Myc-His tag, whole cell lysate

Lysates/proteins at 5 µg per lane.

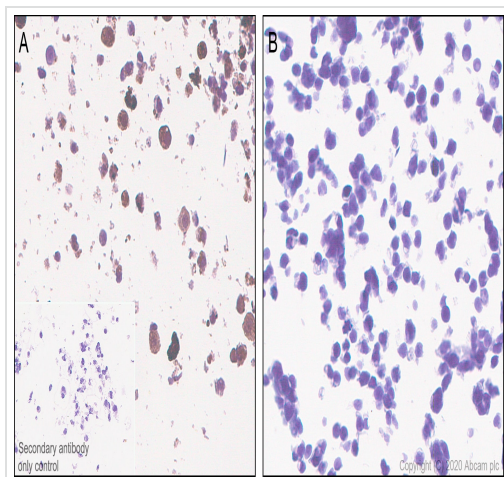
**Secondary**

**All lanes :** Peroxidase-Conjugated Goat anti-Mouse IgG (H+L) at 1/10000 dilution

**Exposure time:** 1 second

This image was produced using [ab271293](#), the same antibody clone but in a different formulation.

Blocking/Dilution buffer: 5% NFDm/TBST.

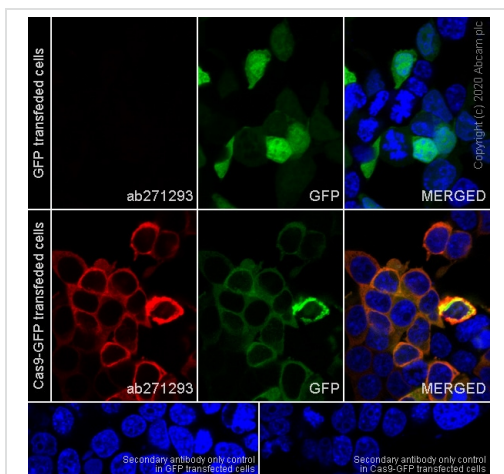


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRISPR-Cas9 antibody [KANI345B] - BSA and Azide free (ab271303)

This image was produced using [ab271293](#), the same antibody clone but in a different formulation.

Immunohistochemical analysis of paraffin-embedded (Panel A) HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) transfected with a GFP-Myc-tagged CRISPR-associated endonuclease Cas9/Csn1 construct and (Panel B) HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) transfected with empty plasmid, labeling CRISPR-Cas9 with [ab271293](#) at 1/200 (4.58 ug/ml) dilution followed by a ready to use Goat Anti-Rat IgG H&L (HRP polymer) ([ab214882](#)). Counterstained with Hematoxylin. Positive staining on (A) HEK-293T transfected with a GFP-Myc-tagged CRISPR-associated endonuclease Cas9/Csn1 construct, no staining on (B) HEK-293T transfected with empty plasmid.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rat IgG H&L (HRP polymer) ([ab214882](#)).



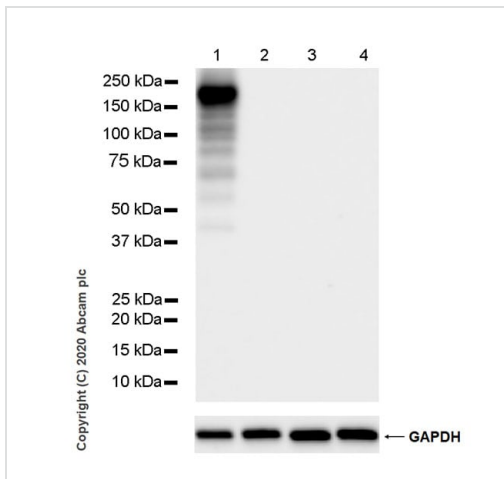
Immunocytochemistry - Anti-CRISPR-Cas9 antibody [KANI345B] - BSA and Azide free (ab271303)

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Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized 293T+OE-94 cells labelling CRISPR-Cas9 with [ab271293](#) at 1/50 dilution (18.32 ug/ml), followed by [ab150160](#) Goat Anti-Rat IgG H&L (Alexa Fluor® 594) antibody at 1/1000 dilution (2 ug/ml) (Red). The nuclear counterstain was DAPI (Blue).

Confocal image showing cytoplasmic staining in 293T cells transfected with GFP-tagged Cas9 expression vector.

Secondary antibody only control: Secondary antibody is [ab150160](#) Goat Anti-Rat IgG H&L (Alexa Fluor® 594) antibody at 1/1000 dilution (2 ug/ml).



Western blot - Anti-CRISPR-Cas9 antibody  
[KANI345B] - BSA and Azide free (ab271303)

**All lanes :** Anti-CRISPR-Cas9 antibody [KANI345B] ([ab271293](#)) at 1/5000 dilution

**Lane 1 :** HEK-293 (human embryonic kidney epithelial cell) transfected with CRISPR-Cas9 (Q99ZW2, *Streptococcus pyogenes* serotype M1) with GFP-Myc tag, whole cell lysate

**Lane 2 :** HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate

**Lane 3 :** NIH/3T3 (mouse embryonic fibroblast) whole cell lysate

**Lane 4 :** C6 (rat glial tumor glial cell), whole cell lysate

Lysates/proteins at 5 µg per lane.

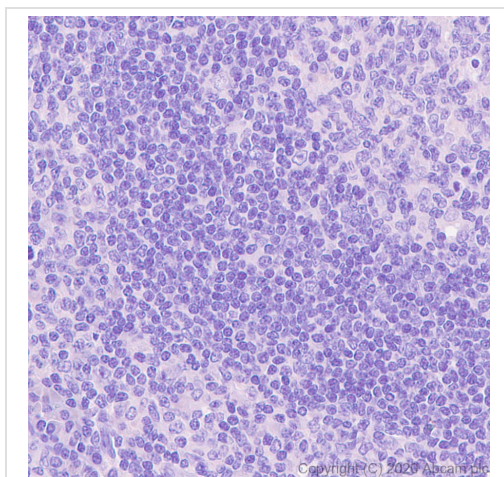
### Secondary

**All lanes :** Peroxidase-Conjugated Goat anti-Mouse IgG (H+L) at 1/10000 dilution

**Exposure time:** 1 second

This image was produced using [ab271293](#), the same antibody clone but in a different formulation.

Blocking/Dilution buffer: 5% NFDm/TBST.



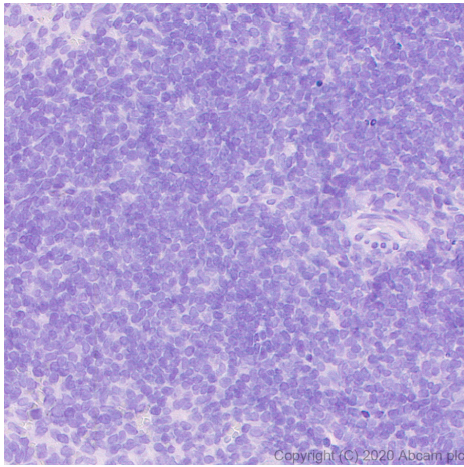
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRISPR-Cas9 antibody  
[KANI345B] - BSA and Azide free (ab271303)

This image was produced using [ab271293](#), the same antibody clone but in a different formulation.

Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling CRISPR-Cas9 with [ab271293](#) at 1/200 (4.58 µg/ml) dilution followed by a ready to use Goat Anti-Rat IgG H&L (HRP polymer) ([ab214882](#)). Counterstained with Hematoxylin. Heat mediated antigen retrieval using [ab93678](#) (citrate buffer, pH 6.0).

**Negative control:** No staining on the human tonsil.



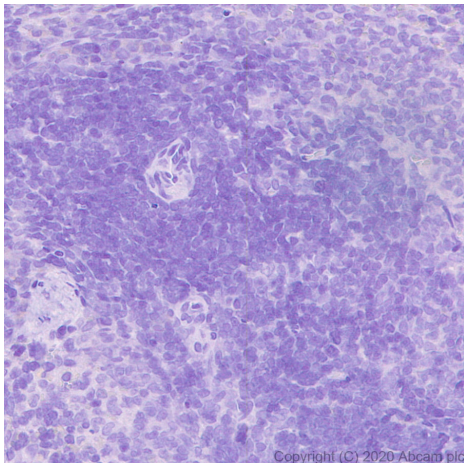


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRISPR-Cas9 antibody [KANI345B] - BSA and Azide free (ab271303)

This image was produced using [ab271293](#), the same antibody clone but in a different formulation.

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling CRISPR-Cas9 with [ab271293](#) at 1/200 (4.58 ug/ml) dilution followed by a ready to use Goat Anti-Rat IgG H&L (HRP polymer) ([ab214882](#)). Counterstained with Hematoxylin. Heat mediated antigen retrieval using [ab93678](#) (citrate buffer, pH 6.0).

**Negative control:** No staining on the mouse spleen.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRISPR-Cas9 antibody [KANI345B] - BSA and Azide free (ab271303)

This image was produced using [ab271293](#), the same antibody clone but in a different formulation.

Immunohistochemical analysis of paraffin-embedded rat spleen tissue labeling CRISPR-Cas9 with [ab271293](#) at 1/200 (4.58 ug/ml) dilution followed by a ready to use Goat Anti-Rat IgG H&L (HRP polymer) ([ab214882](#)). Counterstained with Hematoxylin. Heat mediated antigen retrieval using [ab93678](#) (citrate buffer, pH 6.0).

**Negative control:** No staining on the rat spleen.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-CRISPR-Cas9 antibody [KANI345B] - BSA and Azide free (ab271303)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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