# abcam

## Product datasheet

## Anti-VGLUT2 antibody [EPR21085] - BSA and Azide free ab227906

יובעדער RabMAb

画像数8

#### 製品の概要

製品名 Anti-VGLUT2 antibody [EPR21085] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EPR21085] to VGLUT2 - BSA and Azide free

由来種 Rabbit

アプリケーション 適用あり: ICC/IF, IP, IHC-P, WB, IHC-Fr

種交差性 交差種: Mouse. Rat

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: Mouse cerebral cortex, hypothalamus, hippocampus and brain lysates; Rat brain, cortex and cerebellum lysates; IHC-P: Mouse brain and cerebrum tissues; Rat brain tissue; IHC-Fr: Mouse thalamus tissue; Rat cortex tissue; IP: Mouse brain lysate; ICC/IF: Rat midbrain neuron cells.

ab227906 is the carrier-free version of ab216463.

Our carrier-free 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.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

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**.

特記事項

1

## 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** pH: 7.2

Constituent: 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** EPR21085

アイソタイプ IgG

#### 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ab227906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		1/250.
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Predicted molecular weight: 64 kDa.
IHC-Fr		Use at an assay dependent concentration.  Perform heat mediated antigen retrieval with Tris/EDTA buffer pH  9.0 before commencing with IHC staining protocol.

### ターゲット情報

機能 Mediates the uptake of glutamate into synaptic vesicles at presynaptic nerve terminals of

excitatory neural cells. May also mediate the transport of inorganic phosphate.

組織特異性 Predominantly expressed in adult brain. Expressed in amygdala, caudate nucleus, cerebral

cortex, frontal lobe, hippocampus, medulla, occipital lobe, putamen, spinal cord, substantia nigra,

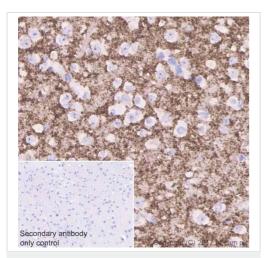
subthalamic nucleus, temporal lobe and thalamus.

**配列類似性** Belongs to the major facilitator superfamily. Sodium/anion cotransporter family. VGLUT subfamily.

**発生段階** Expressed in fetal brain.

**細胞内局在** Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane. Membrane. Cell junction,

#### 画像



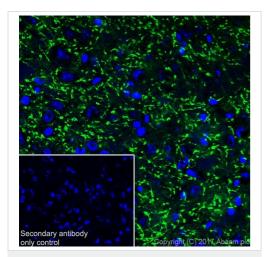
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-VGLUT2 antibody
[EPR21085] - BSA and Azide free (ab227906)

Immunohistochemical analysis of paraffin-embedded mouse cerebrum tissue labeling VGLUT2 with <u>ab216463</u> at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Granularly cytoplasmic staining in mouse cerebrum is observed (PMID: 24804702). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab216463).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



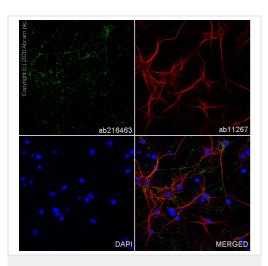
Immunohistochemistry (Frozen sections) - Anti-VGLUT2 antibody [EPR21085] - BSA and Azide free (ab227906)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen sections of mouse thalamus tissue labeling VGLUT2 with <a href="mailto:ab216463">ab216463</a> at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (<a href="mailto:ab150077">ab150077</a>) secondary antibody at 1/1000 dilution (green). Positive staining in mouse thalamus.

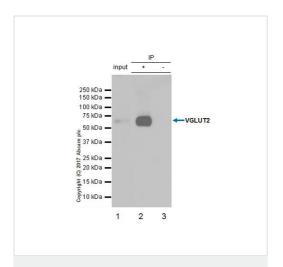
The nuclear counter stain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (Alexa Fluor<sup>®</sup> 488) (**ab150077**) secondary antibody at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab216463).



Immunocytochemistry/ Immunofluorescence - Anti-VGLUT2 antibody [EPR21085] - BSA and Azide free (ab227906)



Immunoprecipitation - Anti-VGLUT2 antibody

[EPR21085] - BSA and Azide free (ab227906)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized rat midbrain neuron cells labelling VGLUT2 with <u>ab216463</u> at 1/250 dilution, followed by <u>ab150077</u> Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (2  $\mu$ g/mL) (Green). Confocal image showing positive staining in rat midbrain neuron cell. Confocal scanning Z step was set as 0.3  $\mu$ m followed by image processing with maximum Z projection. <u>ab11267</u> Anti-MAP2 mouse monoclonal antibody was used to counterstain tubulin at 1/500 dilution (4  $\mu$ g/mL) followed by <u>ab150120</u> Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) at 1/1000 dilution (2  $\mu$ g/mL) (Red). The nuclear counterstain was DAPI (Blue).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab216463).

VGLUT2 was immunoprecipitated from 0.35 mg of mouse brain lysate with <u>ab216463</u> at 1/30 dilution. Western blot was performed from the immunoprecipitate using <u>ab216463</u> at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used for detection at 1/10000 dilution.

Lane 1: Mouse brain lysate 10 µg (Input).

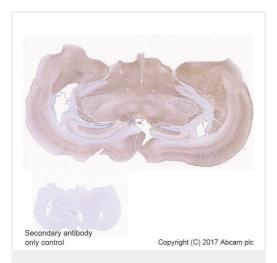
Lane 2: ab216463 IP in mouse brain lysate.

**Lane 3:** Rabbit monoclonal lgG (<u>ab172730</u>) instead of <u>ab216463</u> in mouse brain lysate.

Exposure time: 10 seconds.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab216463).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-VGLUT2 antibody
[EPR21085] - BSA and Azide free (ab227906)

Immunohistochemical analysis of paraffin-embedded mouse brain tissue labeling VGLUT2 with <u>ab216463</u> at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining on mouse forebrain, including cerebral cortex and diencephalon (PMID: 16217795). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab216463).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunohistochemical analysis of paraffin-embedded rat brain tissue labeling VGLUT2 with <u>ab216463</u> at 1/500 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) Ready to use. Cytoplasmic staining on rat forebrain including cerebral cortex and diencephalon is observed (PMID: 16217795). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

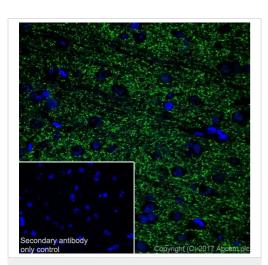
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab216463).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-VGLUT2 antibody

[EPR21085] - BSA and Azide free (ab227906)



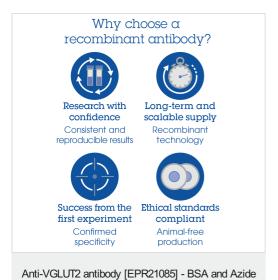
Immunohistochemistry (Frozen sections) - Anti-VGLUT2 antibody [EPR21085] - BSA and Azide free (ab227906)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen sections of rat cortex tissue labeling VGLUT2 with <a href="mailto:ab216463">ab216463</a> at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) (<a href="mailto:ab150077">ab150077</a>) secondary antibody at 1/1000 dilution (green). Positive staining in rat cortex.

The nuclear counter stain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (Alexa Fluor<sup>®</sup> 488) (<u>ab150077</u>) secondary antibody at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab216463).



free (ab227906)

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