abcam

ab316006

Anti-Streptococcus mutans Cell surface antigen I/II antibody [EPR28235-11]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR28235-11
Purification technique	Affinity purification Protein A
Specificity	This antibody detects transfected levels of Streptococcus mutans Cell surface antigen I/II.
Concentration	0.506 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Transfected cell lysate - Streptococcus mutans

Dilution info	1/1000
Notes	-

Predicted

Species	Streptococcus
Dilution info	-
Notes	-

Not recommended

Species	Transfected cell line - Streptococcus mutans, Recombinant fragment - Streptococcus mutans
Dilution info	-
Notes	-

IHC-P

Tested

Species	Transfected cell line - Streptococcus mutans
Dilution info	1/500
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Predicted

Species	Streptococcus
Dilution info	-
Notes	-

Not recommended

Species	Transfected cell lysate - Streptococcus mutans, Recombinant fragment - Streptococcus mutans
Dilution info	-

Notes	-

ICC/IF

Tested

Species	Transfected cell line - Streptococcus mutans
Dilution info	1/250
Notes	-

Predicted

Species	Streptococcus
Dilution info	-
Notes	-

Not recommended

Species	Transfected cell lysate - Streptococcus mutans, Recombinant fragment - Streptococcus mutans
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Transfected cell line - Streptococcus mutans
Dilution info	1/5000
Notes	-

Predicted

Species	Streptococcus
Dilution info	-
Notes	-

Not recommended

Species	Transfected cell lysate - Streptococcus mutans, Recombinant fragment - Streptococcus mutans
Dilution info	-
Notes	-

IP

Tested

Species	Transfected cell lysate - Streptococcus mutans
Dilution info	1/30
Notes	-

Predicted

Species	Streptococcus
Dilution info	-
Notes	-

Not recommended

Species	Transfected cell line - Streptococcus mutans, Recombinant fragment - Streptococcus mutans
Dilution info	-
Notes	-

I-ELISA

Tested

Species	Recombinant fragment - Streptococcus mutans
Dilution info	1000 ng/mL
Notes	-

Predicted

Species	Streptococcus
Dilution info	-
Notes	-

Not recommended

Species	Transfected cell lysate - Streptococcus mutans, Transfected cell line - Streptococcus mutans
Dilution info	-
Notes	-

Target data

See full target information spaP

Function	Surface protein antigen implicated in dental caries.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

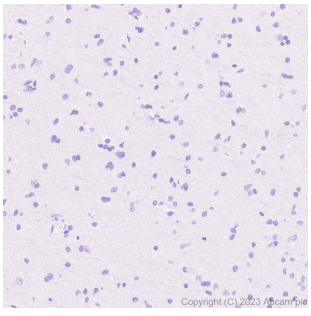
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

9 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Streptococcus mutans Cell surface antigen I/II antibody [EPR28235-11] (ab316006)

Streptococcus mutans Cell surface antigen I/II Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human cerebrum using rabbit Anti-Streptococcus mutans Cell surface antigen I/II antibody

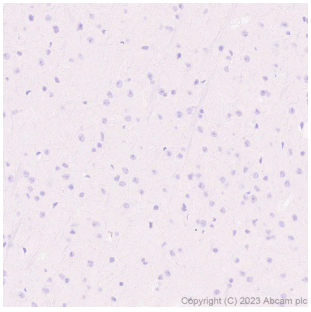
Immunohistochemical analysis of paraffin-embedded Human cerebrum tissue labeling Streptococcus mutans Cell surface antigen I/II with ab316006 at 1/500 (1.012 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Negative control: no staining on human cerebrum. The section was incubated with ab316006 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Streptococcus mutans Cell surface antigen I/II antibody [EPR28235-11] (ab316006)

Streptococcus mutans Cell surface antigen I/II Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse cerebrum using rabbit Anti-Streptococcus mutans Cell surface antigen I/II antibody

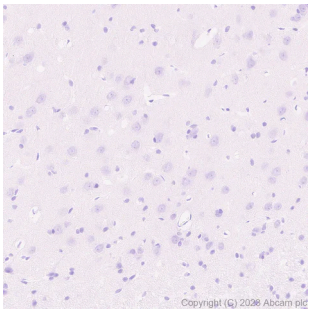
Immunohistochemical analysis of paraffin-embedded Mouse cerebrum tissue labeling Streptococcus mutans Cell surface antigen I/II with ab316006 at 1/500 (1.012 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Negative control: no staining on mouse cerebrum.The section was incubated with ab316006 for 30 mins at room temperature.
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Counterstained with Hematoxylin.

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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Streptococcus mutans Cell surface antigen I/II antibody [EPR28235-11] (ab316006)

Streptococcus mutans Cell surface antigen I/II Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Rat cerebrum using rabbit Anti-Streptococcus mutans Cell surface antigen I/II antibody

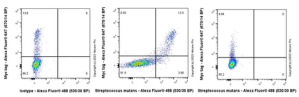
Immunohistochemical analysis of paraffin-embedded Rat cerebrum tissue labeling Streptococcus mutans Cell surface antigen I/II with ab316006 at 1/500 (1.012 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Negative control: no staining on rat cerebrum. The section was incubated with ab316006 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.

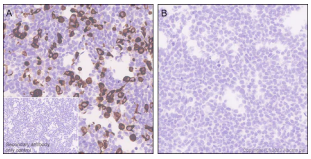


Flow Cytometry (Intracellular) - Anti-Streptococcus mutans Cell surface antigen I/II antibody [EPR28235-11] (ab316006)

Flow cytometric analysis of 2% paraformaldehyde fixed 0.1% Tween-20 permeabilized Isotype (Left) / 293T transfected with a Streptococcus mutans Cell surface antigen I/II expression vector containing a myc-His-tag® (Middle) / 293T transfected with an empty expression vector (Right) cells labelling Streptococcus mutans Cell surface antigen I/II with ab316006 at 1/5000 dilution (0.01 ug)/Middle and Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control.

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.

Cells were surface stained with primary antibody. Fixed with 2% PFA for 10 min followed by intracellularly staining with anti-Myc tag conjugated to Alexa Fluor® 647.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Streptococcus mutans Cell surface antigen I/II antibody [EPR28235-11] (ab316006)

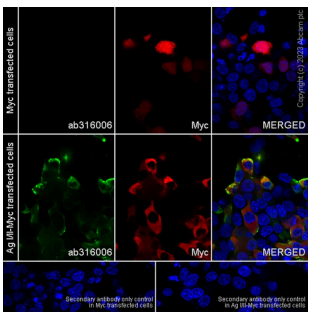
Immunohistochemical analysis of paraffin-embedded (A) HEK-293T (human embryonic kidney epithelial cell) transfected with a Streptococcus mutans Cell surface antigen I/II expression vector containing a myc-His-tag®. (B) HEK-293T transfected with empty vector containing a myc-His-tag®. Tissue labeling Streptococcus mutans Cell surface antigen I/II with ab316006 at 1/500 (1.012 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on HEK-293T transfected with a Myc-His-tagged Streptococcus mutans Cell surface antigen I/II construct (image A). No staining on HEK-293T transfected with empty plasmid (image B). The section was incubated with ab316006 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunocytochemistry/ Immunofluorescence - Anti-Streptococcus mutans Cell surface antigen I/II antibody [EPR28235-11] (ab316006)

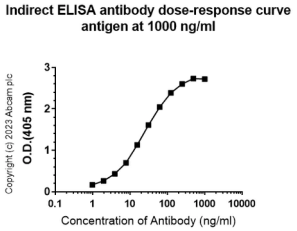
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized 293T (Human embryonic kidney epithelial cell) transfected with a Streptococcus mutans Cell surface antigen I/II expression vector containing a myc-His-tag® cells labelling Streptococcus mutans Cell surface antigen I/II with ab316006 at 1/250 (2.024 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 (2 ug/mL) dilution (Green).

Confocal image showing positive staining in 293T transfected with a Streptococcus mutans Cell surface antigen I/II expression vector containing a myc-His-tag®.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

Myc-Tag Mouse mAb (Alexa Fluor® 647) was used to counterstain at 1/100 (0.38ug/ml) dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2 ug/mL) dilution.

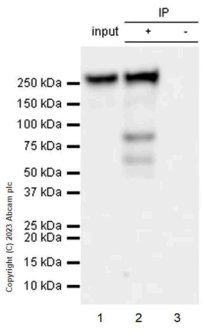


Indirect ELISA - Anti-Streptococcus mutans Cell surface antigen I/II antibody [EPR28235-11] (ab316006)

Indirect ELISA analysis of ab316006 at 1000-0 ng/ml. The Secondary antibody used was Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1:2500 dilution.

Antigen: Streptococcus mutans Cell surface antigen I/II.

Antigen concentration: 1000 ng/ml



Immunoprecipitation - Anti-Streptococcus mutans Cell surface antigen I/II antibody [EPR28235-11] (ab316006)

Streptococcus mutans Cell surface antigen I/II was immunoprecipitated from 0.35 mg 293T (human embryonic kidney epithelial cell) cells transfected with a Streptococcus mutans Cell surface antigen I/II expression vector containing a myc-His-tag®, whole cell lysate with ab316006 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab316006 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: 293T (human embryonic kidney epithelial cell) cells transfected with a Streptococcus mutans Cell surface antigen I/II expression vector containing a myc-His-tag®, whole cell lysate
Lane 2: ab316006 IP in 293T (human embryonic kidney epithelial cell) cells transfected with a Streptococcus mutans Cell surface antigen I/II expression vector containing a myc-His-tag®, whole cell lysate
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab316006 in 293T cells transfected with a Streptococcus mutans Cell surface antigen I/II expression vector containing a myc-His-tag®, whole cell lysate

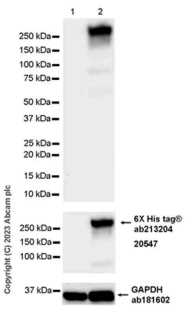
All lanes:
Immunoprecipitation - Anti-Streptococcus mutans Cell surface antigen I/II antibody [EPR28235-11] (ab316006) at 1/30 dilution

All lanes:
293T (human embryonic kidney epithelial cell) cells transfected with a Streptococcus mutans Cell surface antigen I/II expression vector containing a myc-His-tag®, whole cell lysate

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Exposure time: 6s



Western blot - Anti-Streptococcus mutans Cell surface antigen I/II antibody [EPR28235-11] (ab316006)

Streptococcus mutans Cell surface antigen I/II Western blot staining using rabbit Anti-Streptococcus mutans Cell surface antigen I/II antibody

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200000 dilution.

In Western blot, Anti-6X His tag® antibody [EPR20547] - ChIP Grade (ab213204) staining at 1/5000 dilution.

All lanes:
Western blot - Anti-Streptococcus mutans Cell surface antigen I/II antibody [EPR28235-11] (ab316006) at 1/1000 dilution

Lane 1:
293T (human embryonic kidney epithelial cell) cells transfected with an empty vector containing a myc-His-tag®, whole cell lysate at 4 µg

Lane 2:
293T (human embryonic kidney epithelial cell) cells transfected with a Streptococcus mutans Cell surface antigen I/II expression vector containing a myc-His-tag®, whole cell lysate at 4 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 260 kDa, 36 kDa

Exposure time: 3s

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.