abcam

ab300404

Anti-NP-I antibody [EPR25683-17]

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	EPR25683-17
Purification technique	Affinity purification Protein A
Concentration	0.478 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

Not recommended

Species	Rat, Mouse, Transfected cell line, Recombinant full length protein - Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/400
Notes	-

Not recommended

Species	Rat, Mouse, Transfected cell line, Recombinant full length protein - Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/50
Notes	-

Not recommended

Species	Rat, Mouse, Transfected cell line, Recombinant full length protein - Human
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Rat, Mouse, Human, Transfected cell line, Recombinant full length protein - Human
Dilution info	-
Notes	-

WB

Tested

Species	Transfected cell line
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

Species	Recombinant full length protein - Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Rat, Mouse
Dilution info	-
Notes	-

Target data

See full target information NPTX1_HUMAN

Function	May be involved in mediating uptake of synaptic material during synapse remodeling or in mediating the synaptic clustering of AMPA glutamate receptors at a subset of excitatory synapses.

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.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	NP-I also known as NP protein or NP-BSA functions as a nucleoprotein component of ribonucleoprotein complexes. It has a mass of 56 kDa. Expression occurs in both the cytoplasm and nucleus of infected cells. Ribonucleoproteins with NP-I encapsulate viral RNA which helps in the process of viral replication and transcription. NP-I is essential for forming the ribonucleoprotein core stabilizing the viral genome and facilitating interactions with the polymerase.
Biological function summary	NP-I plays important roles in the life cycle of certain viruses. It associates with NP-TX1 another protein component to ensure effective assembly of the viral replication machinery. NP-I is also part of a complex that maintains the integrity of the viral RNA. It modulates host cell responses to viral infection by interacting with host cellular proteins impacting viral pathogenicity and replication efficiency.
Pathways	NP-I interacts with the RNA replication and transcription processes of viruses. It participates in the influenza virus life cycle pathway where NP protein coordinates with polymerase subunits like PB1 PB2 and PA to facilitate RNA synthesis. These interactions and pathways are critical for understanding how viruses exploit host

	cellular machinery to perpetuate their replication cycles. Specifically NP-I contributes to the assembly and regulation of viral RNA genomes within host cells.
Associated diseases and disorders	NP-I is connected to viral infections like influenza. It has a pivotal role in facilitating viral replication and immune evasion influencing the severity of influenza manifestations. The interaction between NP-I and host proteins like interferon regulators can modulate immune responses potentially leading to immune system disorders. By understanding these interactions scientists can develop therapeutic interventions targeting NP-I to control or mitigate influenza viral infections.

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

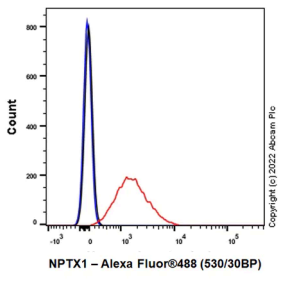
We do not recommend this combination. It is not covered by our product promise.

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.

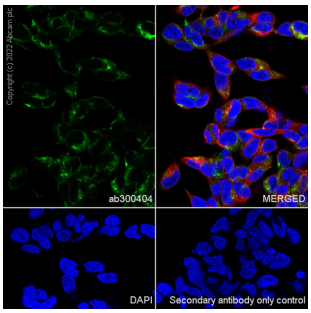
7 product images



Flow Cytometry (Intracellular) - Anti-NP-I antibody [EPR25683-17] (ab300404)

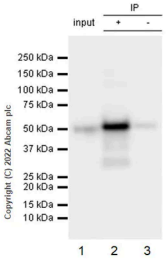
Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HeLa (human cervix adenocarcinoma epithelial cell) cells labelling NPTX1 with ab300404 at 1/500 dilution (0.1ug) (Red) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary

antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-NP-I antibody [EPR25683-17] (ab300404)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized IMR-32 (human neuroblastoma neuroblast) cells labelling NPTX1 with ab300404 at 1/50 (9.56 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2ug/ml dilution (Green). Confocal image showing cytoplasm staining in IMR-32 cell line is observed. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/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 2ug/ml dilution.



Immunoprecipitation - Anti-NP-I antibody [EPR25683-17] (ab300404)

NPTX1 was immunoprecipitated from 0.35 mg Human hypothalamus tissue lysate 10 ug with ab300404 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab300404 at 1/1000 dilution. VeriBlot for IP secondary antibody (HRP) (ab131366) was used at 1/5000 dilution.
Lane 1: Human hypothalamus tissue lysate 10 ug

Lane 2: ab300404 IP in Human hypothalamus tissue lysate

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab300404 in Human hypothalamus tissue lysate

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

Exposure time: 3.25 seconds

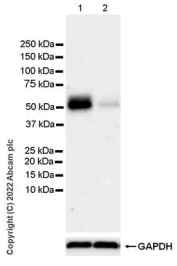
All lanes:
Immunoprecipitation - Anti-NP-I antibody [EPR25683-17] (ab300404) at 1/1000 dilution

All lanes:
Human hypothalamus tissue lysate at 10 µg

Secondary

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

Exposure time: 3.25s



Western blot - Anti-NP-I antibody [EPR25683-17] (ab300404)

Blocking and diluting buffer and concentration: 5% NFDM/TBST
All lanes:
Western blot - Anti-NP-I antibody [EPR25683-17] (ab300404) at 1/1000 dilution

Lane 1:
Hela (Human cervix adenocarcinoma epithelial cell) transfected with scrambled siRNA control, whole cell lysate

Lane 2:

Hela transfected with siRNA specifically targeti NPTX1, whole cell lysate 20

Secondary

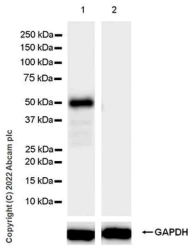
All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Performed under reducing conditions.

Observed band size: 50 kDa

Exposure time: 169s

Western blot - Anti-NP-I antibody [EPR25683-17] (ab300404)



Blocking and diluting buffer and concentration: 5% NFDM/TBST
All lanes:
Western blot - Anti-NP-I antibody [EPR25683-17] (ab300404) at 1/1000 dilution

Lane 1:
Human hypothalamus tissue lysate

Lane 2:
Human heart tissue lysate

Secondary

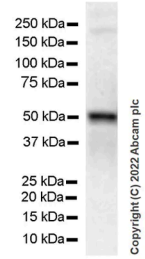
All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Performed under reducing conditions.

Observed band size: 50 kDa

Exposure time: 10s

Western blot - Anti-NP-I antibody [EPR25683-17] (ab300404)



Blocking and diluting buffer and concentration: 5% NFDM/TBST
All lanes:
Western blot - Anti-NP-I antibody [EPR25683-17] (ab300404) at 1/1000 dilution

All lanes:
IMR-32 (Human neuroblastoma neuroblast) whole cell lysate

Secondary

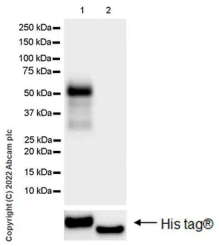
All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Performed under reducing conditions.

Observed band size: 50 kDa

Exposure time: 180s

Western blot - Anti-NP-I antibody [EPR25683-17] (ab300404)



Blocking and diluting buffer and concentration: 5% NFDM/TBST
All lanes:
Western blot - Anti-NP-I antibody [EPR25683-17] (ab300404) at 1/1000 dilution

Lane 1:
His-tagged human NPTX1 recombinant protein

Lane 2:
His-tagged human NPTX2 recombinant protein

Secondary

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

Performed under reducing conditions.

Observed band size: 50 kDa

Exposure time: 3.25s

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