abcam

ab126724

Anti-STIP1/STI1 antibody [EPR6605]

Recombinant | RabMAb | KO Validated

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	EPR6605
Purification technique	Affinity purification Protein A
Concentration	0.18 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/1000
Notes	**For unpurified use at 1/250- 1/500.**

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Rat
Dilution info	1/10000 - 1/50000
Notes	-

Species	Mouse
Dilution info	1/10000 - 1/50000
Notes	-

Species	Human
Dilution info	1/10000 - 1/50000
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/20
Notes	For unpurified use at1/20

Expected

Species	Rat, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information STIP1

Function	Acts as a co-chaperone for HSP90AA1 (PubMed:27353360). Mediates the association of the molecular chaperones HSPA8/HSC70 and HSP90 (By similarity).

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	Stable for 12 months at -20°C

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	STIP1 also known as STI1 is a stress-induced phosphoprotein that assists in the folding and stabilization of other proteins. The protein has a mass of approximately 63 kDa. It acts as a co-chaperone and interacts with key chaperones like HSP70 and HSP90 facilitating the transfer of client proteins between them. STIP1 is expressed in various tissues with significant presence in the nervous system and reproductive organs. It contributes to the protein homeostasis by

	modulating chaperone activity and protecting cells during stress conditions like high temperatures or oxidative stress.
Biological function summary	The stress-induced phosphoprotein STIP1 functions within cytoplasm and is pivotal for cellular integrity. It forms a complex with HSP70 and HSP90 that regulates the folding and activation of a range of client proteins including steroid hormone receptors and kinases. This modulation influences protein activity stability and degradation. STIP1 impacts signal transduction pathways cellular growth and stress responses by influencing how effectively client proteins perform their biological roles within cells.
Pathways	The protein STIP1 plays a significant part in the steroid hormone signaling pathway and the protein folding network. It helps facilitate the proper folding and function of steroid hormone receptors through its interaction with major chaperone proteins HSP70 and HSP90. Both these pathways are important for cell survival and proper cell regulation. By helping with the maturation and activation of client proteins STIP1 ensures that cellular responses to various internal and external signals proceed efficiently.
Associated diseases and disorders	The involvement of STIP1 emerges most clearly in neurodegenerative conditions like Alzheimer's disease and cancer. In Alzheimer's disease STIP1 interacts with prion proteins which influence amyloid-beta aggregation and may impact disease progression. In cancer the protein assists in stabilizing client proteins essential for tumor progression such as steroid hormone receptors and protein kinases. Disruption in STIP1 function can lead to impaired cellular stress responses and may contribute to disease pathogenesis.

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

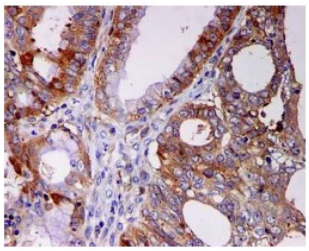
We do not recommend this combination. It is not covered by our product promise.

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.

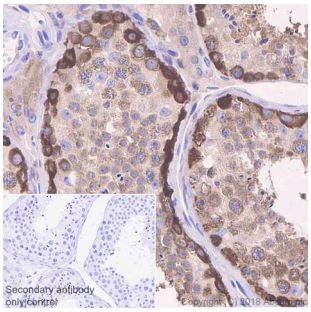
10 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-STIP1/STI1 antibody [EPR6605] (ab126724)

STIP1/STI1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-STIP1/STI1 antibody

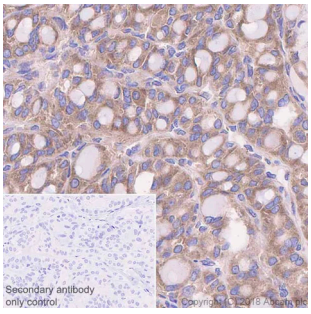
Unpurified ab126724, at a dilution of 1/250, staining STIP1/STI1 in paraffin-embedded human ovarian carcinoma tissue by Immunohistochemistry.
Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-STIP1/STI1 antibody [EPR6605] (ab126724)

STIP1/STI1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-STIP1/STI1 antibody

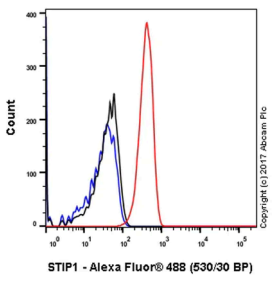
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human testis tissue sections labeling STIP1/STI1 with Purified ab126724 at 1:1000 dilution (0.18 µg/ml). Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use)was used as the secondary antibody. Negative control:PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-STIP1/STI1 antibody [EPR6605] (ab126724)

STIP1/STI1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-STIP1/STI1 antibody

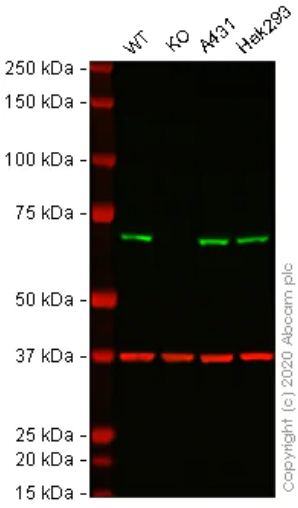
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human thyroid cancer tissue sections labeling STIP1/STI1 with Purified ab126724 at 1:1000 dilution (0.18 µg/ml). Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use)was used as the secondary antibody. Negative control:PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Flow Cytometry (Intracellular) - Anti-STIP1/STI1 antibody [EPR6605] (ab126724)

STIP1/STI1 Flow Cytometry (Intracellular) staining using rabbit Anti-STIP1/STI1 antibody

Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling STIP1/STI1 (red) with purifiedab126724 at a 1/200 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A goat anti-rabbit IgG (Alexa Fluorr® 488) (ab150077) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal IgG (ab172730). Blue (unlabeled control) - Cells without incubation with primary and secondary antibodies.



Western blot - Anti-STIP1/STI1 antibody [EPR6605] (ab126724)

STIP1/STI1 Western blot staining using rabbit Anti-STIP1/STI1 antibody

Lanes 1 - 4: Merged signal (red and green). Green - ab126724 observed at 63 kDa. Red - loading control ab8245 (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.
ab126724 was shown to react with STIP1/STI1 in wild-type HAP1 cells in western blot with loss of signal observed in STIP1 knockout sample. Wild-type and STIP1 knockout HAP1 cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1% Tween®) before incubation with ab126724 and ab8245 (Mouse anti-GAPDH antibody [6C5]) overnight at 4°C at a 1 in 10000 Dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

All lanes:
Western blot - Anti-STIP1/STI1 antibody [EPR6605] (ab126724) at 1/10000 dilution

Lane 1:
Wild-type HAP1 cell lysate at 20 µg

Lane 2:
STIP1 knockout HAP1 cell lysate at 20 µg

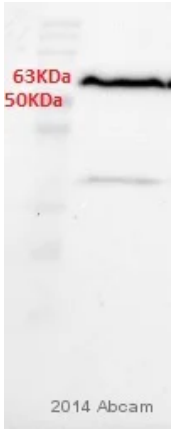
Lane 3:
A431 cell lysate at 20 µg

Lane 4:
HEK-293 cell lysate at 20 µg

Performed under reducing conditions.

Predicted band size: 63 kDa

Observed band size: 63 kDa



This image is courtesy of an anonymous customer review

Western blot - Anti-STIP1/STI1 antibody [EPR6605] (ab126724)

All lanes:
Western blot - Anti-STIP1/STI1 antibody [EPR6605] (ab126724) at 1/1000 dilution

All lanes:
Mouse brain whole tissue lysate at 150 µg

Secondary

All lanes:
HRP-conjugated goat anti-rabbit IgG polyclonal at 1/10000 dilution

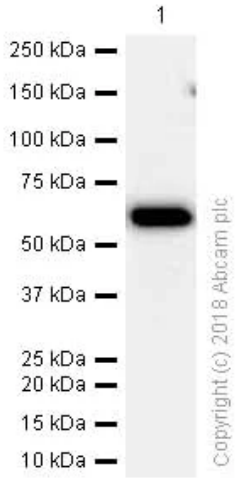
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 63 kDa

Observed band size: 63 kDa

Exposure time: 5min



Western blot - Anti-STIP1/STI1 antibody [EPR6605] (ab126724)

All lanes:
Western blot - Anti-STIP1/STI1 antibody [EPR6605] (ab126724) at 1/20000 dilution

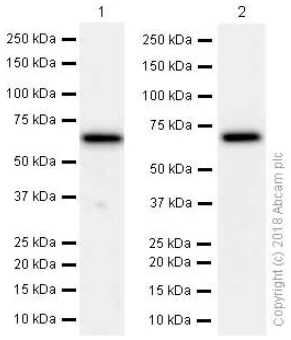
All lanes:
Human brain lysates at 15 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 63 kDa

Observed band size: 63 kDa



Western blot - Anti-STIP1/STI1 antibody [EPR6605] (ab126724)

All lanes:
Western blot - Anti-STIP1/STI1 antibody [EPR6605] (ab126724) at 1/20000 dilution

Lane 1:
Mouse brain lysates at 15 µg

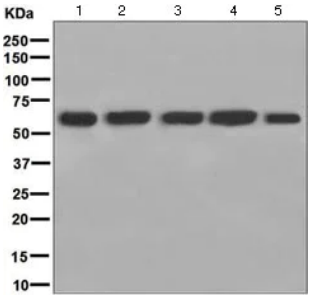
Lane 2:
Rat brain lysates at 15 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 63 kDa

Observed band size: 63 kDa



Western blot - Anti-STIP1/STI1 antibody [EPR6605] (ab126724)

All lanes:
Western blot - Anti-STIP1/STI1 antibody [EPR6605] (ab126724) at 1/10000 dilution

Lane 1:
Jurkat cell lysate at 10 µg

Lane 2:
HeLa cell lysate at 10 µg

Lane 3:
BxPC3 cell lysate at 10 µg

Lane 4:
HepG2 cell lysate at 10 µg

Lane 5:

SK OV 3 cell lysate at 10 µg

Secondary

All lanes:
HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 63 kDa

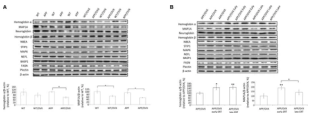


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Western blot - Anti-STIP1/STI1 antibody [EPR6605] (ab126724)

STIP1/STI1 Western blot staining using rabbit Anti-STIP1/STI1 antibody

STIP1/STI1 western blot using anti-STIP1/STI1 antibody [EPR6605] ab126724. Publication image and figure legend from Cui, J., Reed, J., et al., 2019, Front Cell Neurosci, PubMed 31680862.

ab126724 was used in this publication in western blot. This may not be the same as the application(s) guaranteed by Abcam. For a full list of applications guaranteed by Abcam for ab126724 please see the product overview.

Western blot analysis of proteins identified in proteomic analysis. (A) The levels of hemoglobin α, MAP1A, neuroglobin, hemoglobin β, NBEA, STIP1, MAP6, NEFL, BASP1, FASN, and Plectin were detected in the brain lysates from WT, WT/OVX, APP, and APP/OVX mice, with β-actin as a loading control. (B) The levels of hemoglobin α, MAP1A, neuroglobin, hemoglobin β, NBEA, STIP1, MAP6, NEFL, BASP1, FASN, and Plectin were detected in the brain lysates from APP/OVX, APP/OVX early treatment group and APP/OVX late treatment group, with β-actin as a loading control. (C) The levels of hemoglobin α and MAP1A were detected in the brain lysates from WT, WT/OVX, WT/OVX early treatment group and WT/OVX late treatment group, with β-actin as a loading control. *Indicates $p < 0.05$ compared to APP/OVX or between the designated two groups. **Means $p < 0.01$ compared to APP/OVX or designated group as indicated.

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