abcam

ab302712

Anti-GLTSCR1 antibody [EPR26561-76]

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	EPR26561-76
Purification technique	Affinity purification Protein A
Concentration	0.491 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Not recommended

Species	Mouse, Human, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/500
Notes	-

Species	Human
Dilution info	1/500
Notes	-

Expected

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

ICC/IF

Tested

Species	Mouse
Dilution info	1/100
Notes	-

Species	Human
Dilution info	1/100
Notes	-

Expected

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

IHC-P

Tested

Species	Rat
Dilution info	1/100
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	1/100
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Human
Dilution info	1/100
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

WB

Tested

Species	Rat
Dilution info	1/1000
Notes	-

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

Target data

See full target information BICRA

Function	Component of SWI/SNF chromatin remodeling subcomplex GBAF that carries out key enzymatic activities, changing chromatin structure by altering DNA-histone contacts within a nucleosome in an ATP-dependent manner (PubMed:29374058). May play a role in BRD4-mediated gene transcription (PubMed:21555454).

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

Want a custom formulation?
This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com

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	GLTSCR1 also known as Glioma Tumor Suppressor Candidate Region Gene 1 is a protein that functions in chromatin remodeling. This protein plays an important

	role in regulating gene expression by impacting chromatin structure making genes accessible or inaccessible as needed. The molecular mass of GLTSCR1 is approximately 110 kDa. Expression of GLTSCR1 happens in various human tissues with notable presence in brain tissues where it might influence neurological functions.
Biological function summary	GLTSCR1 operates as part of the larger BAF chromatin remodeling complex which is vital for modifying chromatin architecture. This complex aids transcription regulation and helps control cellular differentiation. The protein acts to influence the organization of chromatin which can lead in turn to the activation or repression of certain genes. This function positions GLTSCR1 as an important player in maintaining cellular homeostasis and determining cell fate.
Pathways	GLTSCR1 is key in transcriptional regulation pathways and plays a role in neural development. The protein interacts with other components within the BAF complex like BRG1 and BAF155 thereby exerting influence across pathways linked to DNA accessibility and transcription. Its activity can impact pathways such as the Wnt signaling pathway where its chromatin remodeling capabilities interface with signal transduction processes influencing cell division and development.
Associated diseases and disorders	Aberrations in GLTSCR1 are linked to glioblastoma multiforme and neurodevelopmental disorders. In glioblastoma disruptions in chromatin remodeling and gene expression can lead to uncontrolled cell growth. The disorder may involve interactions with other protein complexes including ones containing MLL1 involved in histone modification suggesting a wide-net impact on epigenetic regulation. Additionally its association with the nervous system development links it to certain neurodevelopmental anomalies indicating its broader significance in maintaining nervous system integrity.

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

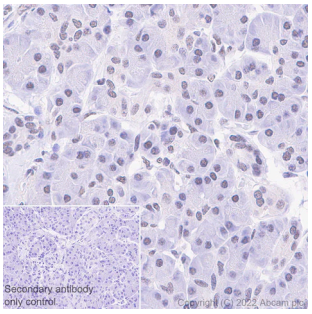
We do not recommend this combination. It is not covered by our product promise.

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.

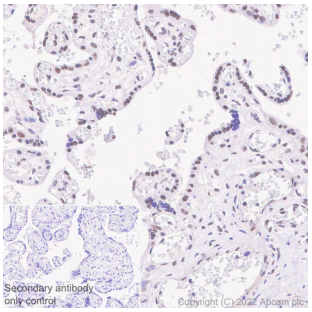
Full details and terms and conditions can be found here:
Terms & Conditions.

11 product images



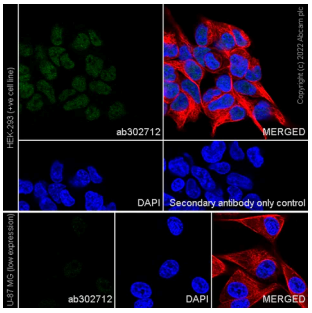
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GLTSCR1 antibody [EPR26561-76] (ab302712)

Immunohistochemical analysis of paraffin-embedded Human pancreas tissue labeling GLTSCR1 with ab302712 at 1/100 (4.91 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Nuclear staining on human pancreas. The section was incubated with ab302712 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 Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



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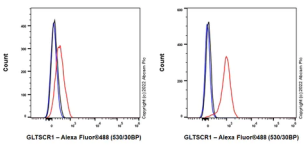
Immunohistochemical analysis of paraffin-embedded Human placenta tissue labeling GLTSCR1 with ab302712 at 1/100 (4.91 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Nuclear staining on human placenta. The section was incubated with ab302712 for 30 mins 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 Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Immunocytochemistry/ Immunofluorescence - Anti-GLTSCR1 antibody [EPR26561-76] (ab302712)

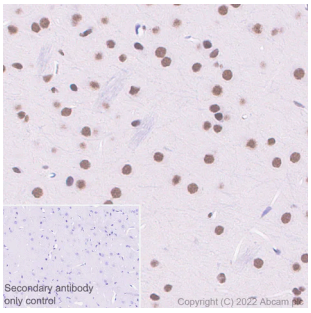
GLTSCR1 Immunocytochemistry/ Immunofluorescence staining of HEK-293 (human embryonic kidney epithelial cell) using rabbit Anti-GLTSCR1 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HEK-293 (human embryonic kidney epithelial cell) cells labelling GLTSCR1 with ab302712 at 1/100 (4.91 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 nuclear staining in HEK-293 cell lineLow expression: U-87 MG (PMID: 29374058) 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 2 ug/ml dilution.



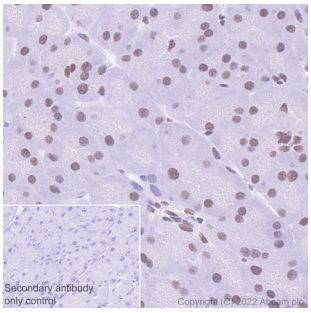
Flow Cytometry (Intracellular) - Anti-GLTSCR1 antibody [EPR26561-76] (ab302712)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized U-87 MG (human glioblastoma-astrocytoma epithelial cell, Left) / HEK-293 (human embryonic kidney epithelial cell, Right) cells labelling GLTSCR1 with ab302712 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. Low expression: U-87 MG (PMID: 29374058).



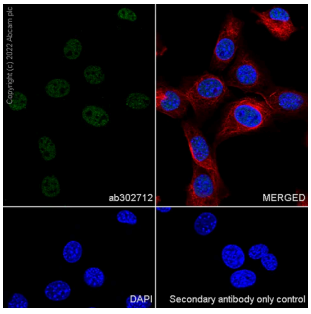
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GLTSCR1 antibody [EPR26561-76] (ab302712)

Immunohistochemical analysis of paraffin-embedded Rat cerebrum tissue labeling GLTSCR1 with ab302712 at 1/500 (0.982 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Nuclear staining on rat cerebrum. The section was incubated with ab302712 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 Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



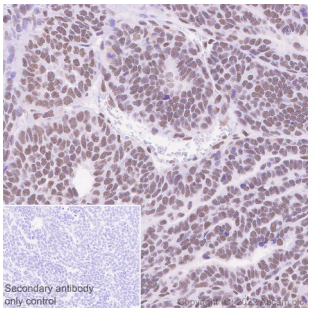
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Immunohistochemical analysis of paraffin-embedded Mouse pancreas tissue labeling GLTSCR1 with ab302712 at 1/500 (0.982 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Nuclear staining on mouse pancreas. The section was incubated with ab302712 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 Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



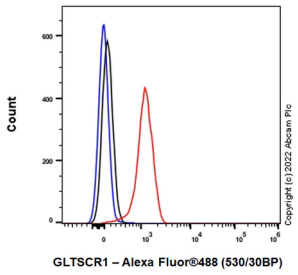
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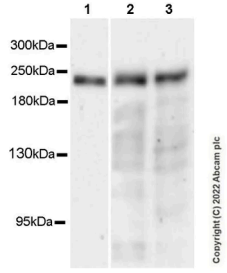
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GLTSCR1 antibody [EPR26561-76] (ab302712)

Immunohistochemical analysis of paraffin-embedded Mouse head and neck tissue labeling GLTSCR1 with ab302712 at 1/500 (0.982 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Nuclear staining on mouse head and neck squamous cell carcinoma. The section was incubated with ab302712 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 Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



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Western blot - Anti-GLTSCR1 antibody [EPR26561-76] (ab302712)

Blocking and diluting buffer and concentration: 5% NFDM/TBST Lane 2 and 3 of this blot were developed using a high sensitivity ECL substrate. Lysates were freshly made and used for Western blotting immediately to minimize protein degradation. Exposure time: 3 minutes
All lanes:
Western blot - Anti-GLTSCR1 antibody [EPR26561-76] (ab302712) at 1/1000 dilution

Lane 1:
293T (human embryonic kidney epithelial cell), whole cell lysate 20 µg

Lane 2:
NIH/3T3 (mouse embryonic fibroblast), whole cell lysate 20 µg

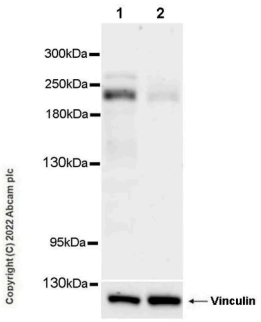
Lane 3:
PC-12 (rat adrenal gland pheochromocytoma cell), whole cell lysate 20 µg

Secondary

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

Observed band size: 200 kDa

Exposure time: 3min



Western blot - Anti-GLTSCR1 antibody [EPR26561-76] (ab302712)

GLTSCR1 Western blot staining using rabbit Anti-GLTSCR1 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST Lysates were freshly made and used for Western blotting immediately to minimize protein degradation. The membrane was incubateded with primary antibodies overnight at 4 °C Low expression: U-87 MG (PMID: 29374058) The expression profile observed is consistent with what has been described in the literature (PMID: 29374058). Exposure time: 114 seconds
All lanes:
Western blot - Anti-GLTSCR1 antibody [EPR26561-76] (ab302712) at 1/1000 dilution

Lane 1:
HEK-293 (human embryonic kidney epithelial cell), whole cell lysate 20 µg

Lane 2:
U-87 MG (human glioblastoma-astrocytoma epithelial cell), whole cell lysate 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

Observed band size: 200 kDa

Exposure time: 114s

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