abcam

Product datasheet

Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody ab96718

11 Abreviews 36 References 10 Images

Overview

Product name	Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody
Description	Rabbit polyclonal to OGT / O-Linked N-Acetylglucosamine Transferase
Host species	Rabbit
Tested applications	**Suitable for:** ICC/IF, WB, IHC-P, IP
Species reactivity	**Reacts with:** Mouse, Rat, Human, Zebrafish **Predicted to work with:** Cow, Pig
Immunogen	Recombinant fragment corresponding to Human OGT/ O-Linked N-Acetylglucosamine Transferase aa 213-462. Database link: **O15294**
Positive control	WB: HeLa, PC-12 cells. Mouse brain tissue extracts. ICC/IF: MCF7, DU145, HeLa cells. IHC-P: Cal27 Xenograft. Rat hind brain. IP: A431 cells.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: 78% PBS, 1% BSA, 20% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Clonality	Polyclonal

Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab96718 in the following tested applications.

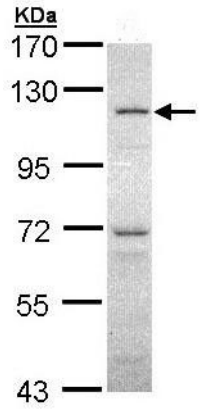
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use at an assay dependent concentration.
WB	★★★★★ (8)	1/500 - 1/3000. Predicted molecular weight: 117 kDa.
IHC-P	★★★★★ (1)	1/100 - 1/1000.
IP		1/100 - 1/500.

Target

Function	Addition of nucleotide-activated sugars directly onto the polypeptide through O-glycosidic linkage with the hydroxyl of serine or threonine. Mediates the O-glycosylation of MLL5 and HCFC1. Promotes proteolytic maturation of HCFC1.
Tissue specificity	Highly expressed in pancreas and to a lesser extent in skeletal muscle, heart, brain and placenta. Present in trace amounts in lung and liver.
Pathway	Protein modification; protein glycosylation.
Sequence similarities	Belongs to the O-GlcNAc transferase family. Contains 13 TPR repeats.
Domain	The TPR repeat domain mediates recognition of protein substrates.
Post-translational modifications	Ubiquitinated, leading to its proteasomal degradation.
Cellular localization	Cytoplasm. Nucleus. Mostly in the nucleus.

Images

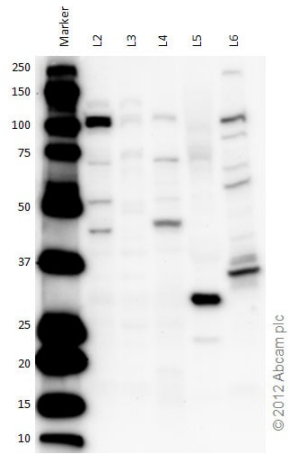


Western blot - Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody (ab96718)

Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody (ab96718) at 1/1000 dilution + HeLa whole cell lysate at 30 µg

Predicted band size: 117 kDa

7.5% SDS PAGE



Western blot - Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody (ab96718)

All lanes : Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody (ab96718) at 1 µg/ml

Lane 1 : Marker
Lane 2 : Zebrafish brain homogenate at 20 µg
Lane 3 : Zebrafish heart homogenate at 20 µg
Lane 4 : Zebrafish liver homogenate at 20 µg
Lane 5 : Zebrafish skeletal muscle homogenate at 20 µg
Lane 6 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate at 20 µg

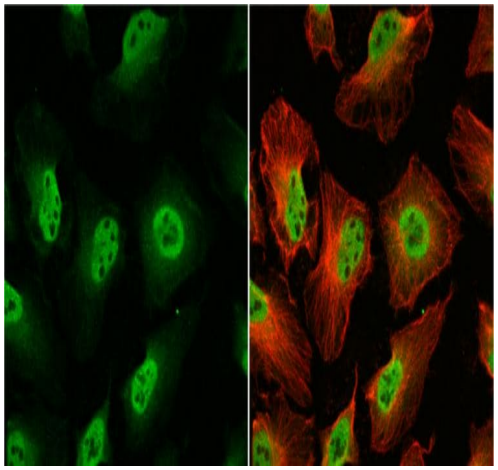
Secondary
All lanes : Goat polyclonal to Rabbit IgG – H&L – Pre-Adsorbed (HRP) at 1/6000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

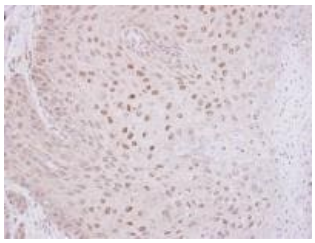
Predicted band size: 117 kDa
Observed band size: 117 kDa

Exposure time: 5 minutes



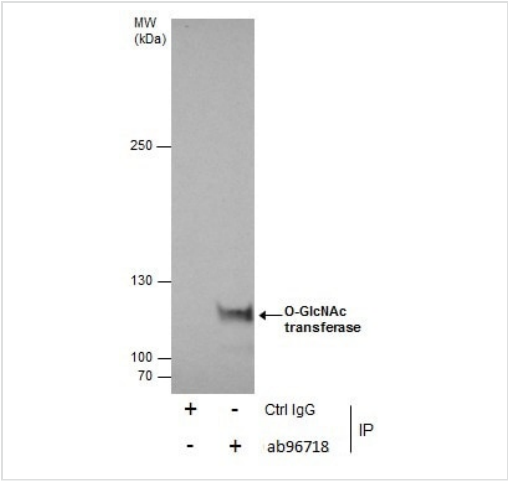
Immunocytochemistry/ Immunofluorescence - Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody (ab96718)

HeLa cells stained for O-GlcNAc (green) using ab96718 at 1/200 dilution in ICC/IF.



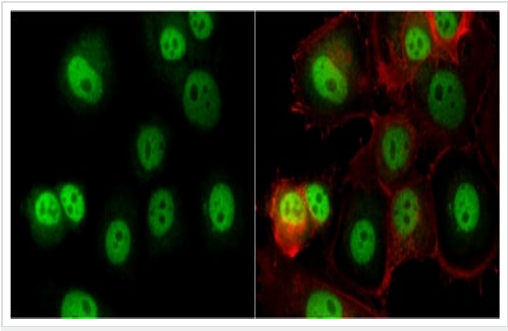
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody (ab96718)

Immunohistochemical analysis of paraffin-embedded Cal27 Xenograft, using ab96718 at 1/100 dilution.



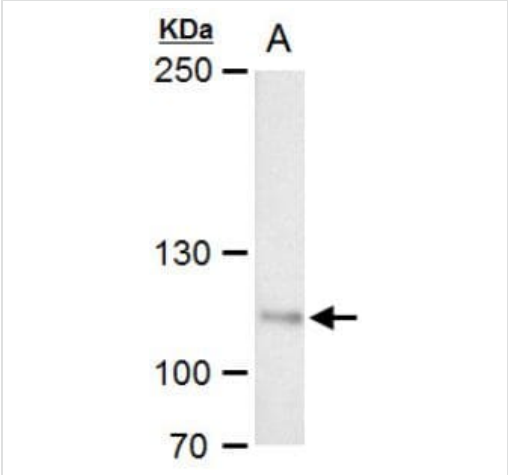
Immunoprecipitation - Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody (ab96718)

Immunoprecipitation analysis of OGT/O-linked N-Acetylglucosamine Transferase protein from A431 whole cell extracts using ab96718 (5µg). Western blot analysis was performed using ab96718 and an Easyblot anti-rabbit IgG was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody (ab96718)

Ab96718 staining OGT / O-Linked N-Acetylglucosamine Transferase in MCF7 cells by ICC/IF (Immunocytochemistry/Immunofluorescence). MFC7 cells were fixed with paraformaldehyde at room temperature for 15 minutes. Samples were incubated with primary antibody at a 1:500 dilution.

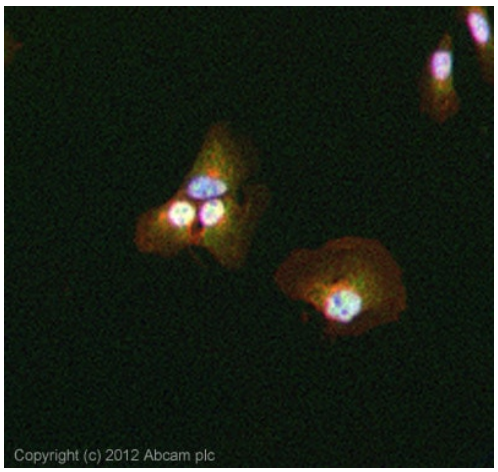


Western blot - Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody (ab96718)

Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody (ab96718) at 1/1000 dilution + PC-12 whole cell extract at 30 µg

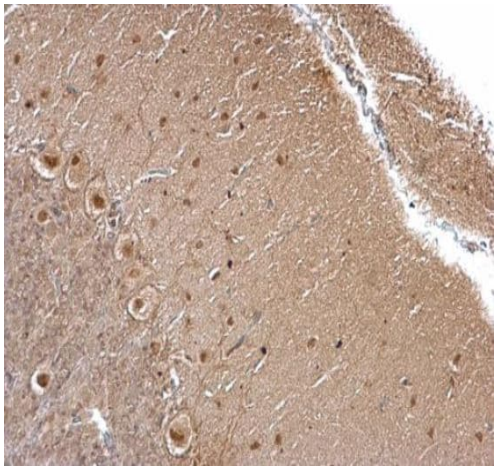
Predicted band size: 117 kDa

5% SDS-PAGE



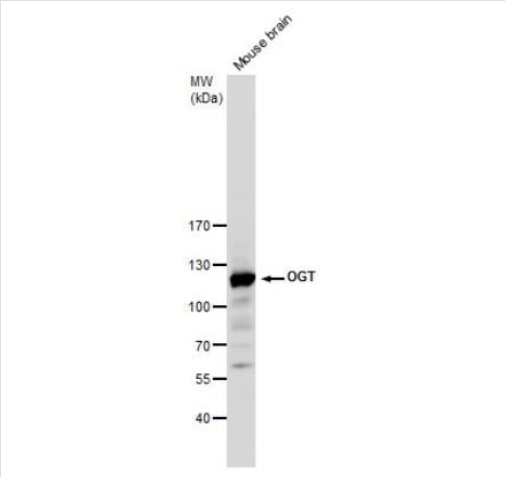
Immunocytochemistry/ Immunofluorescence - Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody (ab96718)

ICC/IF image of ab96718 stained DU145 cells. The cells were 4% paraformaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab96718, 1µg/ml) overnight at +4°C. The secondary antibody (green) was **ab96899**, DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody (ab96718)

Paraffin embedded rat hind brain tissue stained for O-GlcNAc using ab96718 at 1/500 in immunohistochemical analysis.



Western blot - Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody (ab96718)

Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody (ab96718) at 1/2000 dilution + Mouse brain tissue extract at 50 µg

Predicted band size: 117 kDa

7.5% SDS-PAGE

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors