

## Product datasheet

# Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody [EPR12713] ab177941

Recombinant RabMAb

★★★★★ [3 Abreviews](#) [21 References](#) [6 Images](#)

### Overview

<b>Product name</b>	Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody [EPR12713]
<b>Description</b>	Rabbit monoclonal [EPR12713] to OGT / O-Linked N-Acetylglucosamine Transferase
<b>Host species</b>	Rabbit
<b>Specificity</b>	The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, ICC/IF, IHC-P <b>Unsuitable for:</b> IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: A549, HeLa, and 293T cell lysates, Mouse heart and pancreas, Rat heart. IHC-P: human breast carcinoma tissue and lung carcinoma tissue. Flow Cyt (intra): K562 cells. ICC/IF: A549 cells.
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR12713
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab177941 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

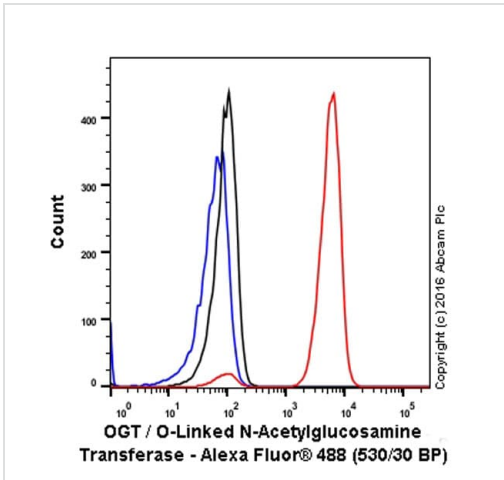
Application	Abreviews	Notes
Flow Cyt (Intra)		1/10 - 1/100. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (2)	1/1000 - 1/5000. Detects a band of approximately 110 kDa (predicted molecular weight: 116 kDa).
ICC/IF		1/50 - 1/100.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.

**Application notes** Is unsuitable for IP.

## Target

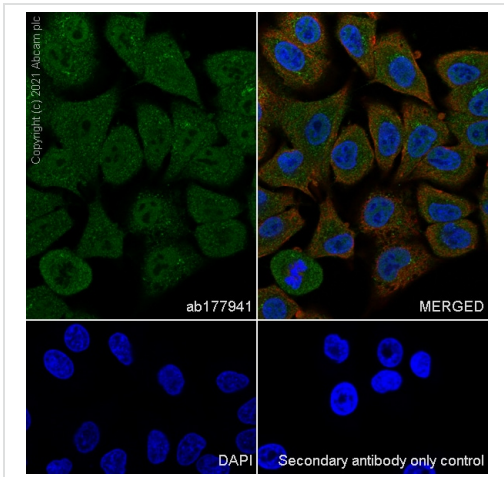
<b>Function</b>	Addition of nucleotide-activated sugars directly onto the polypeptide through O-glycosidic linkage with the hydroxyl of serine or threonine. Mediates the O-glycosylation of MLL5 and HCFC1. Promotes proteolytic maturation of HCFC1.
<b>Tissue specificity</b>	Highly expressed in pancreas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

## Images



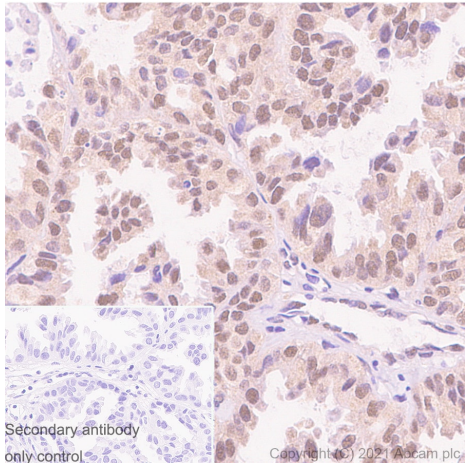
Flow Cytometry (Intracellular) - Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody [EPR12713] (ab177941)

Intracellular Flow Cytometry analysis of K-562 (Human chronic myelogenous leukemia lymphoblast) cells labeling OGT / O-Linked N-Acetylglucosamine Transferase with purified ab177941 at 1:40 dilution (10 µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150081**) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as a isotype control. Cell without incubation with primary antibody and secondary antibody (Blue) were used as unlabeled control.



Immunocytochemistry/ Immunofluorescence - Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody [EPR12713] (ab177941)

Immunocytochemistry/ Immunofluorescence analysis of A549 (Human lung carcinoma epithelial cell) cells labeling OGT / O-Linked N-Acetylglucosamine Transferase using ab177941. The cells were fixed with 4% paraformaldehyde then permeabilized with 0.1% Triton X-100. The cells were then incubated with ab177941 at 1:100 dilution followed by a further incubation with a Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 2 µg/ml (shown in green). Nuclear DNA was labelled in blue with DAPI. Cells were counterstained using **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1:200 dilution (shown in red). Secondary antibody only control: PBS instead of the primary antibody.



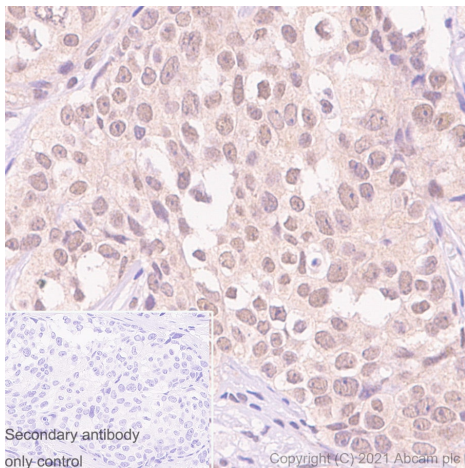
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody [EPR12713] (ab177941)

Immunohistochemical analysis of Paraffin-embedded sections human lung carcinoma tissue labelling OGT / O-Linked N-Acetylglucosamine Transferase with ab177941 at 1:2000 dilution (0.2 µg/ml), followed by a ready to use secondary Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Staining on human lung carcinoma tissue is observed. Counter stained with Haematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0).

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



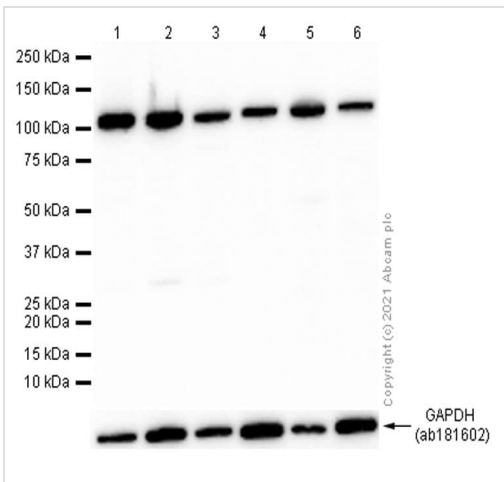
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody [EPR12713] (ab177941)

Immunohistochemical analysis of Paraffin-embedded sections human breast carcinoma tissue labelling OGT / O-Linked N-Acetylglucosamine Transferase with ab177941 at 1:2000 dilution (0.2 µg/ml), followed by a ready to use secondary Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Staining on human breast carcinoma tissue is observed. Counter stained with Haematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0).

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Western blot - Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody [EPR12713] (ab177941)

**All lanes :** Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody [EPR12713] (ab177941) at 1/10000 dilution

**Lane 1 :** A549 (Human lung carcinoma epithelial cell) whole cell lysate

**Lane 2 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

**Lane 3 :** 293T (Human embryonic kidney epithelial cell) whole cell lysate

**Lane 4 :** Mouse heart

**Lane 5 :** Mouse pancreas

**Lane 6 :** Rat heart

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution





**Predicted band size:** 116 kDa

**Observed band size:** 110 kDa

Blocking and diluting buffer and concentration: 5% NFD/MTBST.

[ab181602](#) was used as GAPDH loading control.

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-OGT / O-Linked N-Acetylglucosamine Transferase antibody [EPR12713] (ab177941)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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