


Product datasheet

Anti-MGEA5/OGA antibody ab105217

KO VALIDATED

[3 References](#) [3 Images](#)

Overview

Product name	Anti-MGEA5/OGA antibody
Description	Rabbit polyclonal to MGEA5/OGA
Host species	Rabbit
Specificity	From Jan 2024, QC testing of replenishment batches of this polyclonal changed. All tested and expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch, please contact our Scientific Support who will be happy to help.
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rabbit, Horse, Cow, Dog, Pig, Macaque monkey, Gorilla 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	This antibody gave a positive signal in the following whole cell lysates: U87mg; JEG3; PDX1. ICC/IF: SKNSH cells.
General notes	<p>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.</p> <p>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</p>

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: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab105217 in the following tested applications.

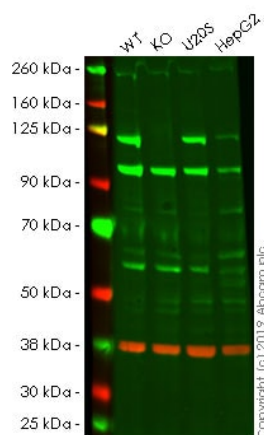
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 120 kDa (predicted molecular weight: 103 kDa).
ICC/IF		Use a concentration of 1 µg/ml.

Target

Function	<p>Isoform 1: Cleaves GlcNAc but not GalNAc from O-glycosylated proteins. Can use p-nitrophenyl-beta-GlcNAc and 4-methylumbelliferone-GlcNAc as substrates but not p-nitrophenyl-beta-GalNAc or p-nitrophenyl-alpha-GlcNAc (in vitro) (PubMed:11148210). Does not bind acetyl-CoA and does not have histone acetyltransferase activity (PubMed:24088714).</p> <p>Isoform 3: Cleaves GlcNAc but not GalNAc from O-glycosylated proteins. Can use p-nitrophenyl-beta-GlcNAc as substrate but not p-nitrophenyl-beta-GalNAc or p-nitrophenyl-alpha-GlcNAc (in vitro), but has about six times lower specific activity than isoform 1.</p>
Tissue specificity	Ubiquitous. Shows highest expression in the brain, placenta and pancreas.
Sequence similarities	Belongs to the glycosyl hydrolase 84 family.
Post-translational modifications	Proteolytically cleaved by caspase-3 during apoptosis. The fragments interact with each other; cleavage does not decrease enzyme activity.
Cellular localization	Cytoplasm and Nucleus.

Images



Western blot - Anti-MGEA5/OGA antibody
(ab105217)

All lanes : Anti-MGEA5/OGA antibody (ab105217) at 1 μ g

Lane 1 : Wild-type HAP1 whole cell lysate

Lane 2 : MGEA5 knockout HAP1 whole cell lysate

Lane 3 : U2OS whole cell lysate

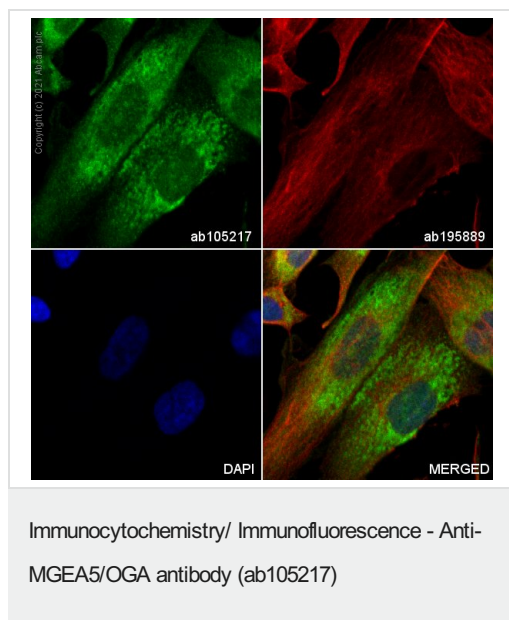
Lane 4 : HepG2 whole cell lysate

Lysates/proteins at 20 μ g per lane.

Predicted band size: 103 kDa

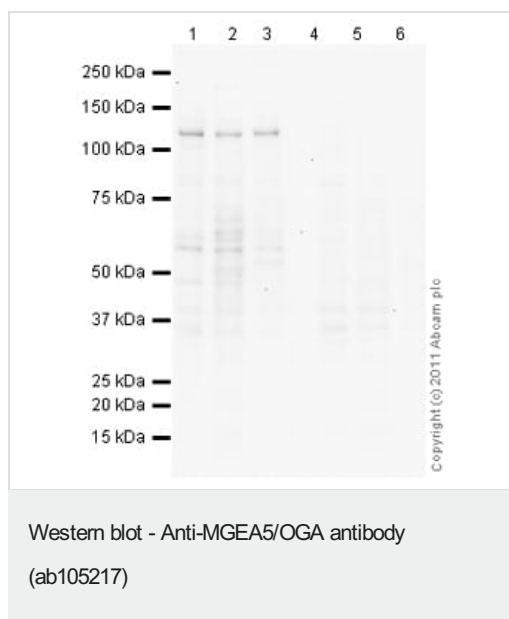
Lanes 1 -4: Merged signal (red and green). Green - ab105217 observed at 120 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab105217 was shown to recognize in wild-type HAP1 cells as signal was lost at the expected MW in MGEA5 knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and MGEA5 knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% NF Milk. Ab105217 and **ab8245** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1 μ g/ml and 1/20000 dilution respectively. Blots were developed 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 1/20000 dilution for 1 hour at room temperature before imaging.



ab105217 staining MGEA5 in SKNSH cells. The cells were fixed with 4% PFA (10min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab105217 at 1/900 dilution and **ab195889**, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at 1/250 dilution (shown in red). The secondary antibody (shown in green) was **ab150081** Alexa Fluor® 488 Goat anti-Rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



All lanes : Anti-MGEA5/OGA antibody (ab105217) at 1 µg/ml

Lane 1 : U-87 MG (Human glioblastoma astrocytoma) Whole Cell Lysate

Lane 2 : JEG-3 (Human placental choriocarcinoma cell line) Whole Cell Lysate

Lane 3 : PDX1 (Pancreatic and duodenal homeobox 1) Whole Cell Lysate

Lane 4 : U-87 MG (Human glioblastoma astrocytoma) Whole Cell Lysate with Immunising peptide at 1 µg/ml

Lane 5 : JEG-3 (Human placental choriocarcinoma cell line) Whole Cell Lysate with Immunising peptide at 1 µg/ml

Lane 6 : PDX1 (Pancreatic and duodenal homeobox 1) Whole Cell Lysate with Immunising peptide at 1 µg/ml

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 103 kDa

Observed band size: 120 kDa

Additional bands at: 58 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 4 minutes

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

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