

Product datasheet

Anti-MGEA5/OGA antibody [EPR7154(B)] α b124807

KO VALIDATED Recombinant RabMAb

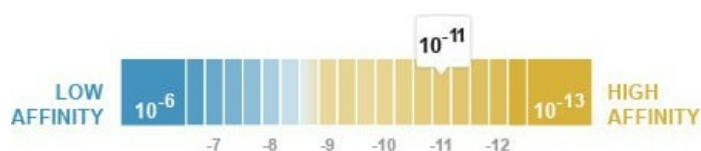
★★★★★ 1 Abreviews 22 References 8 Images

Overview

Product name	Anti-MGEA5/OGA antibody [EPR7154(B)]
Description	Rabbit monoclonal [EPR7154(B)] to MGEA5/OGA
Host species	Rabbit
Tested applications	Suitable for: WB, IP, IHC-P Unsuitable for: Flow Cyt or ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human MGEA5/OGA. The exact sequence is proprietary. (Peptide available as ab155521)
Positive control	WB: HEK-293T, HeLa, BxPC-3, JAR and fetal brain lysates. IHC-P: Human kidney and colon tissue. IP: HeLa cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	$K_D = 9.80 \times 10^{-11}$ M



[Learn more about K_D](#)

Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: PBS, 0.05% BSA, 40% Glycerol
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR7154(B)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab124807 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

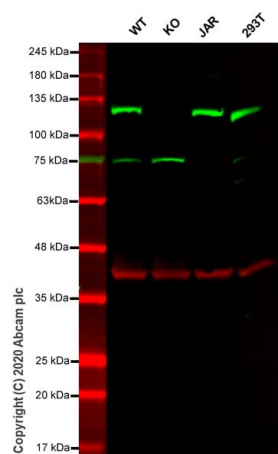
Application	Abreviews	Notes
WB	★★★★★ (1)	1/5000. Detects a band of approximately 130 kDa (predicted molecular weight: 102 kDa). For unpurified use at 1/10000 - 1/5000.
IP		1/30. For unpurified use at 1/100 - 1/500.
IHC-P		1/50. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. For unpurified use at 1/100 - 1/250. See IHC antigen retrieval protocols.

Application notes Is unsuitable for Flow Cyt or ICC/IF.

Target

Function	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). 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.
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
[EPR7154(B)] (ab124807)

All lanes : Anti-MGEA5/OGA antibody [EPR7154(B)] (ab124807)
at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : MGEA5 knockout HeLa cell lysate

Lane 3 : JAR cell lysate

Lane 4 : HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

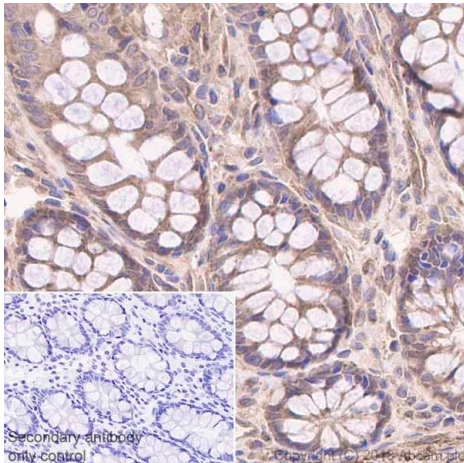
Performed under reducing conditions.

Predicted band size: 102 kDa

Observed band size: 130 kDa

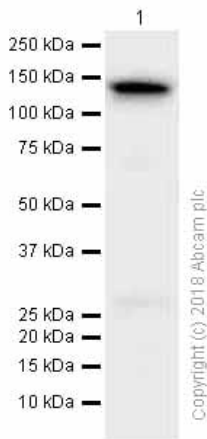
Lanes 1-4: Merged signal (red and green). Green - ab124807 observed at 130 kDa. Red - loading control, **ab8245** observed at 37 kDa.

ab124807 Anti-MGEA5/OGA antibody [EPR7154(B)] was shown to specifically react with MGEA5/OGA in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab265821** (knockout cell lysate **ab257263**) was used. Wild-type and MGEA5/OGA knockout samples were subjected to SDS-PAGE. ab124807 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 10000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MGEA5/OGA antibody [EPR7154(B)] (ab124807)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human colon tissue sections labeling MGEA5/OGA with purified ab124807 at 1:50 dilution (12.56 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.



Western blot - Anti-MGEA5/OGA antibody [EPR7154(B)] (ab124807)

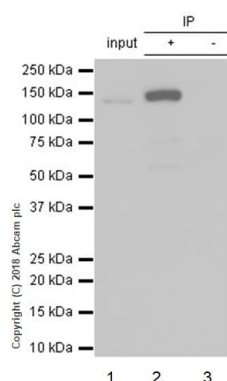
Anti-MGEA5/OGA antibody [EPR7154(B)] (ab124807) at 1/5000 dilution (Purified) + HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates 20ug at 15 µg

Secondary

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

Predicted band size: 102 kDa

Observed band size: 130 kDa



Immunoprecipitation - Anti-MGEA5/OGA antibody
[EPR7154(B)] (ab124807)

ab124807 (purified) at 1:30 dilution (2µg) immunoprecipitating MGEA5/OGA in HeLa whole cell lysate.

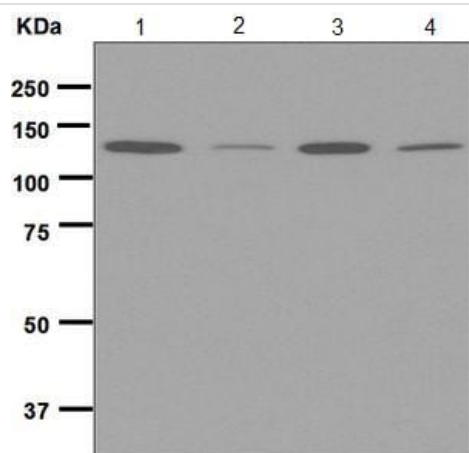
Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10µg

Lane 2 (+): ab124807 & HeLa whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab124807 in HeLa whole cell lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDm/TBST.



Western blot - Anti-MGEA5/OGA antibody
[EPR7154(B)] (ab124807)

All lanes : Anti-MGEA5/OGA antibody [EPR7154(B)] (ab124807) at 1/10000 dilution

Lane 1 : HeLa lysate

Lane 2 : BxPC-3 lysate

Lane 3 : JAR lysate

Lane 4 : Fetal brain lysate

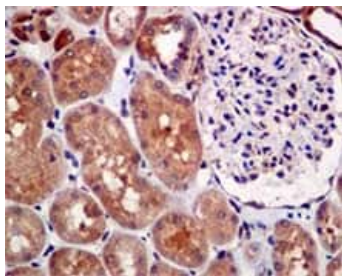
Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 102 kDa

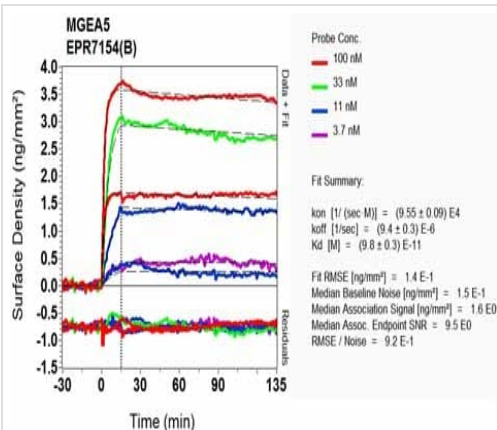
Observed band size: 130 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MGEA5/OGA antibody [EPR7154(B)] (ab124807)

ab124807, at 1/100 dilution, staining MGEA5/OGA in paraffin-embedded Human kidney tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Equilibrium disassociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

OL-RD Scanning - Anti-MGEA5/OGA antibody [EPR7154(B)] (ab124807)

Why choose a recombinant antibody?



Research with confidence
 Consistent and reproducible results



Long-term and scalable supply
 Recombinant technology



Success from the first experiment
 Confirmed specificity



Ethical standards compliant
 Animal-free production

Anti-MGEA5/OGA antibody [EPR7154(B)] (ab124807)

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

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