

## Product datasheet

# Anti-GFPT1 antibody [EPR4854] - BSA and Azide free ab236053

Recombinant RabMAb

4 Images

### Overview

<b>Product name</b>	Anti-GFPT1 antibody [EPR4854] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR4854] to GFPT1 - BSA and Azide free
<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> IHC-P, IP, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human GFPT1 aa 600-700. The exact sequence is proprietary.
<b>Positive control</b>	IHC-P: Human testis, and Human breast carcinoma tissue; WB: Human placenta lysate, MCF7, C6, MEF, 293T, JAR and HeLa cell line lysates, Mouse heart and Mouse cerebral cortex, Rat heart tissue lysate. IP: Jurkat cells.
<b>General notes</b>	Ab236053 is the carrier-free version of <a href="#">ab125069</a> . This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.

Our [carrier-free formats](#) are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.

Use our [conjugation kits](#) for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

ab236053 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm.

*Maxpar® is a trademark of Fluidigm Canada Inc.*

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 production

For more information [see here](#).

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](#).

**We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.**

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as customer reviews and Q&As.

## Properties

---

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR4854
<b>Isotype</b>	IgG

## Applications

---

Our [Abpromise guarantee](#) covers the use of **ab236053** in the following tested applications.

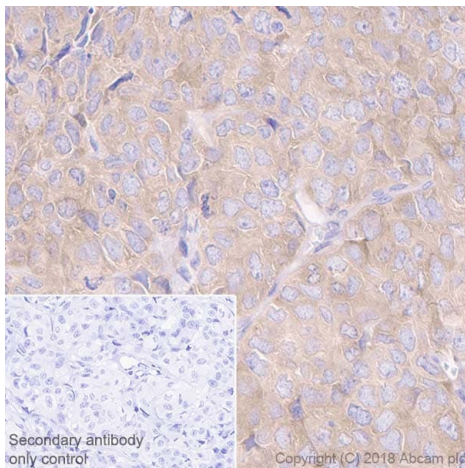
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See <a href="#">IHC antigen retrieval protocols</a> .  The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 79 kDa (predicted molecular weight: 79 kDa).

## Target

<b>Function</b>	Controls the flux of glucose into the hexosamine pathway. Most likely involved in regulating the availability of precursors for N- and O-linked glycosylation of proteins.
<b>Tissue specificity</b>	Isoform 1 is predominantly expressed in skeletal muscle. Not expressed in brain. Seems to be selectively expressed in striated muscle.
<b>Pathway</b>	Nucleotide-sugar biosynthesis; UDP-N-acetyl-alpha-D-glucosamine biosynthesis; alpha-D-glucosamine 6-phosphate from D-fructose 6-phosphate: step 1/1.
<b>Involvement in disease</b>	Defects in GFPT1 are the cause of limb-girdle myasthenia with tubular aggregates (LGMTA) [MIM:610542]. A congenital myasthenic syndrome characterized by onset of proximal muscle weakness in the first decade. Individuals with this condition have a recognizable pattern of weakness of shoulder and pelvic girdle muscles, and sparing of ocular or facial muscles. EMG classically shows a decremental response to repeated nerve stimulation, a sign of neuromuscular junction dysfunction. Affected individuals show a favorable response to acetylcholinesterase (AChE) inhibitors.
<b>Sequence similarities</b>	Contains 1 glutamine amidotransferase type-2 domain. Contains 2 SIS domains.

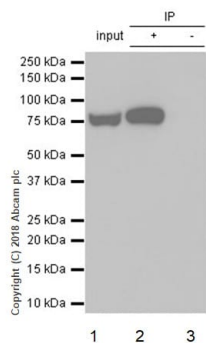
## Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFPT1 antibody [EPR4854] - BSA and Azide free (ab236053)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human breast carcinoma tissue sections labeling GFPT1 with Purified [ab125069](#) at 1:1000 dilution (2.3 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab125069](#))



Immunoprecipitation - Anti-GFPT1 antibody [EPR4854] - BSA and Azide free (ab236053)

[ab125069](#) (purified) at 1:100 dilution (2µg) immunoprecipitating GFPT1 in Jurkat whole cell lysate.

Lane 1 (input): Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate 10µg

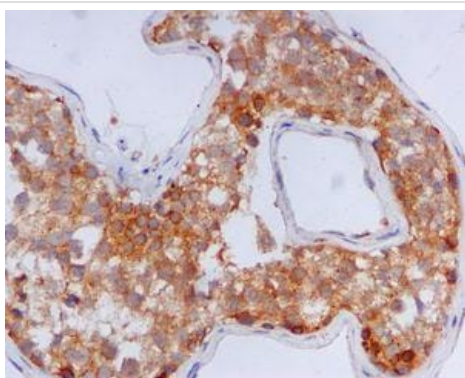
Lane 2 (+): [ab125069](#) & Jurkat whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG ([ab172730](#)) instead of [ab125069](#) in Jurkat 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab125069](#))



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFPT1 antibody [EPR4854] - BSA and Azide free (ab236053)

[ab125069](#), at a 1/100 dilution, staining GFPT1 in paraffin-embedded human testis tissue by immunohistochemistry.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab125069](#)).

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.

### 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-GFPT1 antibody [EPR4854] - BSA and Azide free (ab236053)

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

### 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