

# Anti-Glucose 6 Phosphate Dehydrogenase antibody [EPR20668] ab210702

リコンビナント RabMAb

★★★★☆ **1 Abreviews** **10 References** **画像数 13**

### 製品の概要

製品名	Anti-Glucose 6 Phosphate Dehydrogenase antibody [EPR20668]
製品の詳細	Rabbit monoclonal [EPR20668] to Glucose 6 Phosphate Dehydrogenase
由来種	Rabbit
アプリケーション	<b>適用あり:</b> Flow Cyt (Intra), ICC/IF, IHC-P, WB, IP
種交差性	<b>交差種:</b> Mouse, Rat, Human
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: Rat brain, liver and spleen lysates; Mouse spleen and testis lysates; HeLa, C2C12, MCF7, RAW 264.7, C6, NIH/3T3 and PC-12 whole cell lysates. IHC-P: Human liver, hepatocellular carcinoma and gastric adenocarcinoma tissue; Mouse liver tissue; Rat liver tissue. ICC/IF: HeLa and MCF7 cells. Flow Cyt (intra): HeLa cells. IP: HeLa whole cell lysate.
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <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> <p>For more information <a href="#">see here</a>.</p> <p>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>.</p>

### 製品の特性

製品の状態	Liquid
保存方法	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.
バッファー	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 0.05% BSA, 40% Glycerol, PBS
精製度	Protein A purified

ポリ/モノ	モノクローナル
クローン名	EPR20668
アイソタイプ	IgG

## アプリケーション

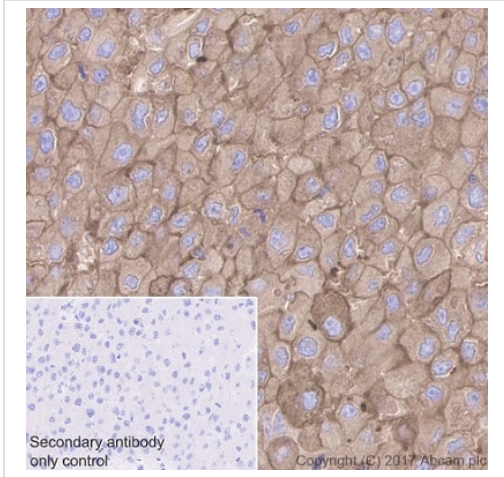
**The Abpromise guarantee**      **Abpromise保証は、次のテスト済みアプリケーションにおけるab210702の使用に適用されます**  
 アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/400.
ICC/IF		1/100.
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB	★★★★☆ (1)	1/1000. Detects a band of approximately 59 kDa (predicted molecular weight: 59 kDa).
IP		1/40.

## ターゲット情報

<b>機能</b>	Catalyzes the rate-limiting step of the oxidative pentose-phosphate pathway, which represents a route for the dissimilation of carbohydrates besides glycolysis. The main function of this enzyme is to provide reducing power (NADPH) and pentose phosphates for fatty acid and nucleic acid synthesis.
<b>組織特異性</b>	Isoform Long is found in lymphoblasts, granulocytes and sperm.
<b>パスウェイ</b>	Carbohydrate degradation; pentose phosphate pathway; D-ribulose 5-phosphate from D-glucose 6-phosphate (oxidative stage): step 1/3.
<b>関連疾患</b>	Anemia, non-spherocytic hemolytic, due to G6PD deficiency
<b>配列類似性</b>	Belongs to the glucose-6-phosphate dehydrogenase family.
<b>翻訳後修飾</b>	Acetylated by ELP3 at Lys-403; acetylation inhibits its homodimerization and enzyme activity. Deacetylated by SIRT2 at Lys-403; deacetylation stimulates its enzyme activity.

## 画像

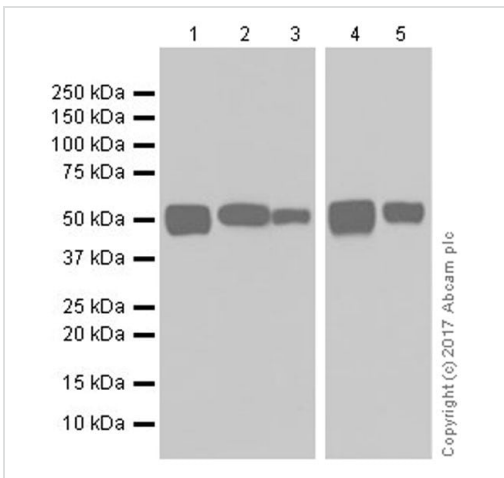


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glucose 6 Phosphate Dehydrogenase antibody [EPR20668] (ab210702)

Immunohistochemical analysis of paraffin-embedded human hepatocellular carcinoma tissue labeling Glucose 6 Phosphate Dehydrogenase with ab210702 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Staining on hepatocellular carcinoma (PMID: 24994855, PMID: 26583321). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-Glucose 6 Phosphate Dehydrogenase antibody [EPR20668] (ab210702)

**All lanes** : Anti-Glucose 6 Phosphate Dehydrogenase antibody [EPR20668] (ab210702) at 1/5000 dilution

**Lane 1** : HeLa (human epithelial cell line from cervix adenocarcinoma cell line) whole cell lysate at 20 µg

**Lane 2** : C2C12 (mouse myoblast cell line) whole cell lysate at 20 µg

**Lane 3** : Mouse testis lysate at 20 µg

**Lane 4** : MCF7 (human breast adenocarcinoma cell line) whole cell lysate at 10 µg

**Lane 5** : RAW 264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate at 10 µg

**Secondary**

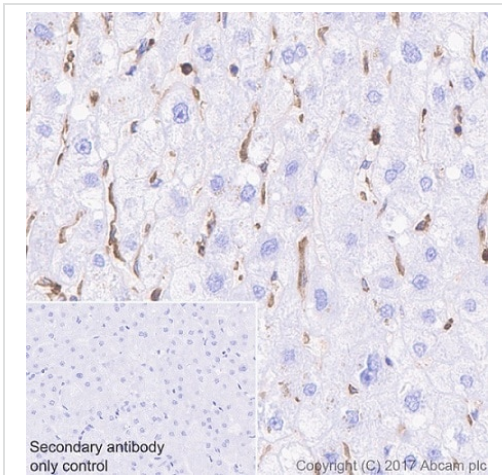
**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

**Predicted band size:** 59 kDa

**Observed band size:** 59 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure times: Lanes 1/2/3: 3 minutes; Lanes 4/5: 3 seconds.

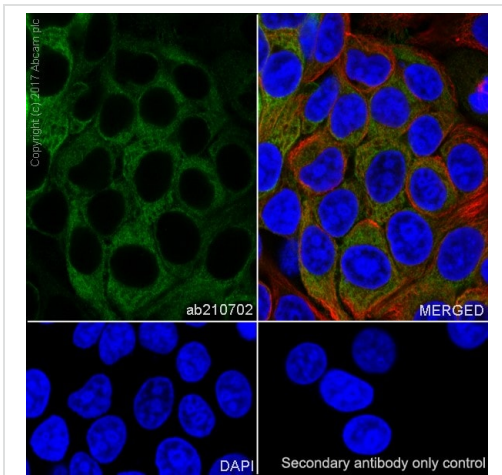


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glucose 6 Phosphate Dehydrogenase antibody [EPR20668] (ab210702)

Immunohistochemical analysis of paraffin-embedded human liver tissue labeling Glucose 6 Phosphate Dehydrogenase with ab210702 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Cytoplasmic staining on stroma of human liver (PMID: 24994855, PMID: 26583321). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

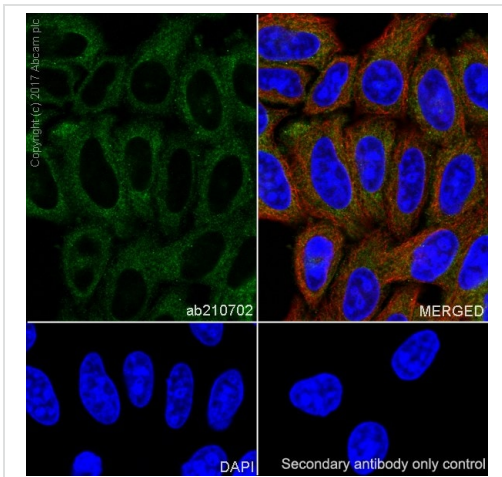


Immunocytochemistry/ Immunofluorescence - Anti-Glucose 6 Phosphate Dehydrogenase antibody [EPR20668] (ab210702)

Immunofluorescent analysis of methanol-fixed MCF7 (human breast adenocarcinoma cell line) cells labeling Glucose 6 Phosphate Dehydrogenase with ab210702 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on MCF7 cell line.

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) (**ab195889**) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) (**ab150077**) secondary antibody at 1/1000 dilution.

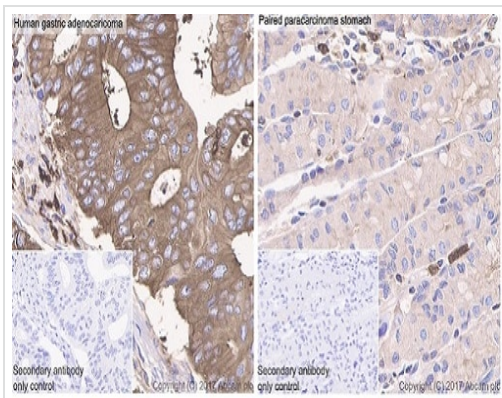


Immunocytochemistry/ Immunofluorescence - Anti-Glucose 6 Phosphate Dehydrogenase antibody [EPR20668] (ab210702)

Immunofluorescent analysis of methanol-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells labeling Glucose 6 Phosphate Dehydrogenase with ab210702 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on HeLA cell line.

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.

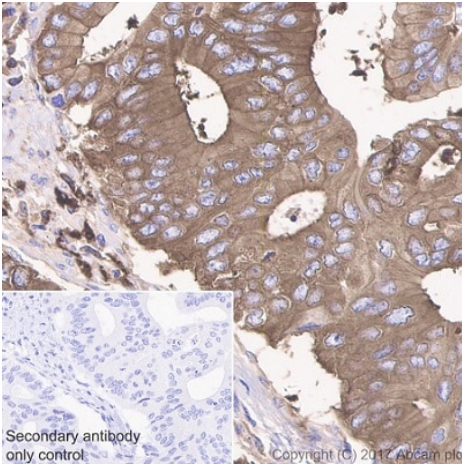


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glucose 6 Phosphate Dehydrogenase antibody [EPR20668] (ab210702)

Immunohistochemical analysis of paraffin-embedded human gastric adenocarcinoma tissue (left panel) and human gastric paracarcinoma (right panel) labeling Glucose 6 Phosphate Dehydrogenase with ab210702 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Strong cytoplasmic staining on human gastric adenocarcinoma, compared with weak cytoplasmic staining on the paired paracarcinoma stomach (PMID: 22012600). Both tissue sections are derived from the same patient sample. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

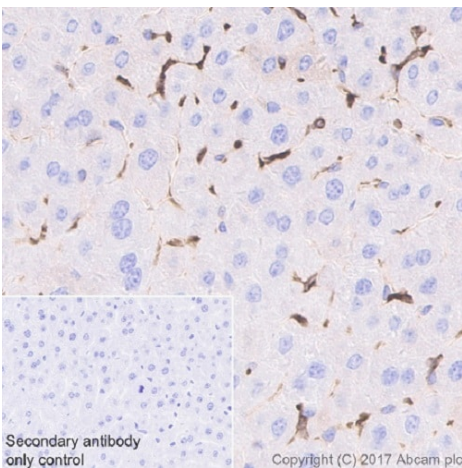


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glucose 6 Phosphate Dehydrogenase antibody [EPR20668] (ab210702)

Immunohistochemical analysis of paraffin-embedded human gastric adenocarcinoma tissue labeling Glucose 6 Phosphate Dehydrogenase with ab210702 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Strong cytoplasmic staining on human gastric adenocarcinoma (PMID: 22012600). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

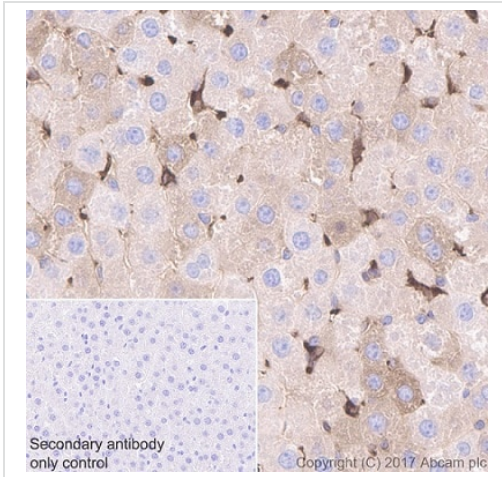


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glucose 6 Phosphate Dehydrogenase antibody [EPR20668] (ab210702)

Immunohistochemical analysis of paraffin-embedded mouse liver tissue labeling Glucose 6 Phosphate Dehydrogenase with ab210702 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Cytoplasmic staining on stroma of mouse liver (PMID: 24994855, PMID: 26583321). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

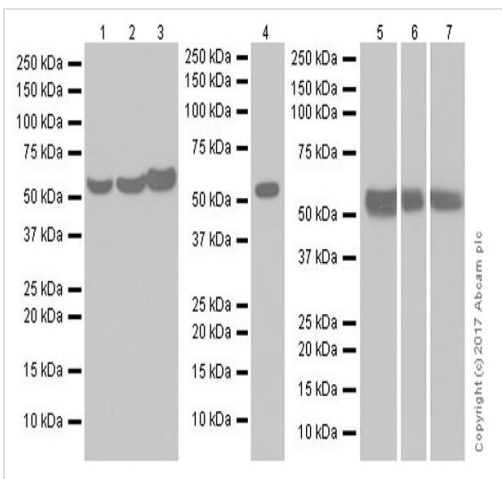


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glucose 6 Phosphate Dehydrogenase antibody [EPR20668] (ab210702)

Immunohistochemical analysis of paraffin-embedded rat liver tissue labeling Glucose 6 Phosphate Dehydrogenase with ab210702 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Cytoplasmic staining on rat liver (PMID: 24994855, PMID: 26583321). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-Glucose 6 Phosphate Dehydrogenase antibody [EPR20668] (ab210702)

**All lanes** : Anti-Glucose 6 Phosphate Dehydrogenase antibody [EPR20668] (ab210702) at 1/1000 dilution

**Lane 1** : Rat brain lysate

**Lane 2** : Rat liver lysate

**Lane 3** : Rat spleen lysate

**Lane 4** : Mouse spleen lysate

**Lane 5** : C6 (rat glial tumor cell line) whole cell lysate

**Lane 6** : NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate

**Lane 7** : PC-12 (rat adrenal gland pheochromocytoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

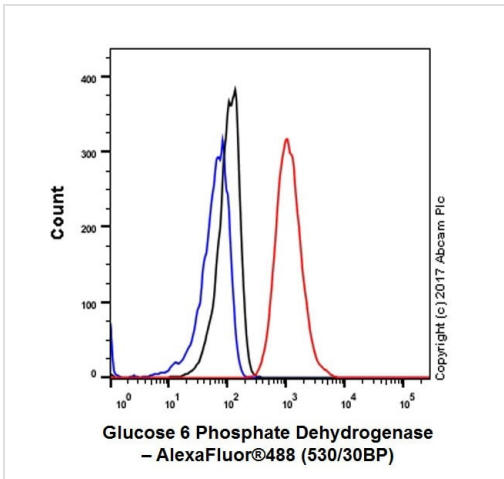
**Predicted band size:** 59 kDa

**Observed band size:** 59 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

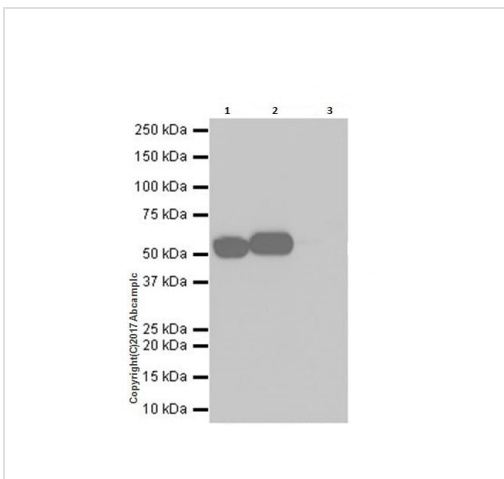
Exposure times: Lanes 1/2/3: 3 minutes; Lane 4: 15 seconds;

Lanes 5/6: 30 seconds; Lane 7: 15 seconds.



Flow Cytometry (Intracellular) - Anti-Glucose 6 Phosphate Dehydrogenase antibody [EPR20668] (ab210702)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cell line labeling Glucose 6 Phosphate Dehydrogenase with ab210702 at 1/400 (red) compared with an Isotype control rabbit monoclonal IgG (**ab172730**) (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-Glucose 6 Phosphate Dehydrogenase antibody [EPR20668] (ab210702)

Glucose 6 Phosphate Dehydrogenase was immunoprecipitated from 0.35mg of HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab210702 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab210702 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10000 dilution.

Lane 1: HeLa whole cell lysate 10 µg (Input).

Lane 2: ab210702 IP in HeLa whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab210702 in HeLa whole cell lysate.

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: 30 seconds.



### 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-Glucose 6 Phosphate Dehydrogenase antibody  
[EPR20668] (ab210702)

**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.co.jp/abpromise> or contact our technical team.

### Terms and conditions

---

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