

### Anti-GRP78 BiP antibody [EPR4041(2)] ab108615

リコンビナント **RabMAb**

★★★★★ **3 Abreviews** **60 References** 画像数 **11**

#### 製品の概要

製品名	Anti-GRP78 BiP antibody [EPR4041(2)]
製品の詳細	Rabbit monoclonal [EPR4041(2)] to GRP78 BiP
由来種	Rabbit
特異性	<p>Stimulation may be required to allow detection of the target protein due to low levels of endogenous expression in some samples. Please see images below for recommended treatment conditions and positive controls.</p> <p>The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.</p>
アプリケーション	<p><b>適用あり:</b> Flow Cyt (Intra), WB, IHC-P</p> <p><b>適用なし:</b> ICC/IF</p>
種交差性	<b>交差種:</b> Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: HeLa, NIH/3T3, LnCaP, MCF7, 293T, U-87 MG, THP-1, MDA-MB-231 and HepG2 whole cell lysate ( <b>ab7900</b> ); Human liver lysates, Mouse heart, lung, liver and testis lysates; Rat liver lysates. Huvec and RAW 264.7 cells treated with tunicamycin. IHC-P: Human breast carcinoma Tissue Flow Cyt (intra): HeLa cells
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 <b><a href="#">see here</a></b>.</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 <b><a href="#">RabMAb<sup>®</sup> patents</a></b>.</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. Stable for 12 months at -20°C.

バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, PBS
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR4041(2)
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ab108615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。

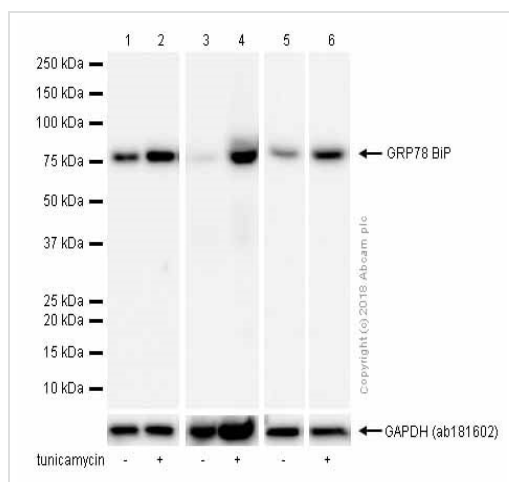
アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/200.
WB	★★★★★ (1)	1/1000 - 1/10000. Predicted molecular weight: 72 kDa. Stimulation may be required to allow detection of the target protein due to low levels of endogenous expression in some samples. Please see images for recommended treatment conditions and positive controls.
IHC-P	★★★★★ (1)	1/100 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See <b><u>IHC antigen retrieval protocols</u></b> . <b>For unpurified, use 1/50 - 1/100.</b> The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.

**追加情報** Is unsuitable for ICC/IF.

## ターゲット情報

機能	Probably plays a role in facilitating the assembly of multimeric protein complexes inside the endoplasmic reticulum. Involved in the correct folding of proteins and degradation of misfolded proteins via its interaction with DNAJC10, probably to facilitate the release of DNAJC10 from its substrate.
関連疾患	Autoantigen in rheumatoid arthritis.
配列類似性	Belongs to the heat shock protein 70 family.
細胞内局在	Endoplasmic reticulum lumen. Melanosome. Cytoplasm. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

## 画像



Western blot - Anti-GRP78 BiP antibody  
[EPR4041(2)] (ab108615)

**All lanes :** Anti-GRP78 BiP antibody [EPR4041(2)] (ab108615) at 1/1000 dilution (purified)

**Lane 1 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

**Lane 2 :** HeLa (Human cervix adenocarcinoma epithelial cell) treated with 10ug/ml tunicamycin for 12 hours whole cell lysates

**Lane 3 :** MCF-7 (Human breast adenocarcinoma epithelial cell) whole cell lysates

**Lane 4 :** MCF-7 (Human breast adenocarcinoma epithelial cell) treated with 10ug/ml tunicamycin for 48 hours whole cell lysates

**Lane 5 :** MEF (Mouse embryonic fibroblast) whole cell lysates

**Lane 6 :** MEF (Mouse embryonic fibroblast) treated with 10ug/ml tunicamycin for 48 hours whole cell lysates

Lysates/proteins at 15 µg per lane.

## Secondary

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

**Predicted band size:** 72 kDa

Blocking and diluting buffer: 5% NFDM/TBST.

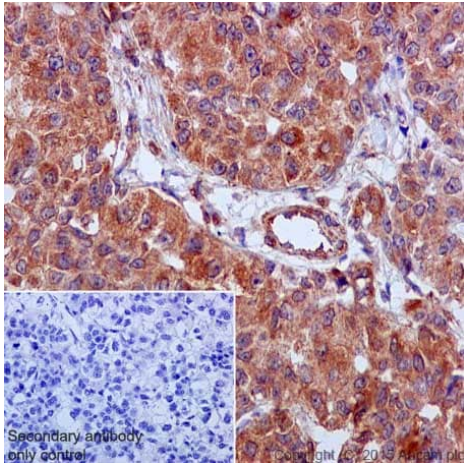
Tunicamycin induces the expression of GRP78 BiP reported by PMID 22859938

## Exposure time:

Lanes 1 and 2: 20 seconds

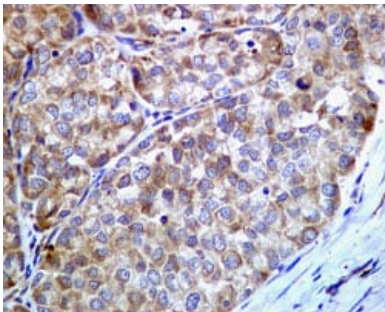
Lanes 3 and 4: 30 seconds

Lanes 5 and 6: 5 seconds



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GRP78 BiP antibody [EPR4041(2)] (ab108615)

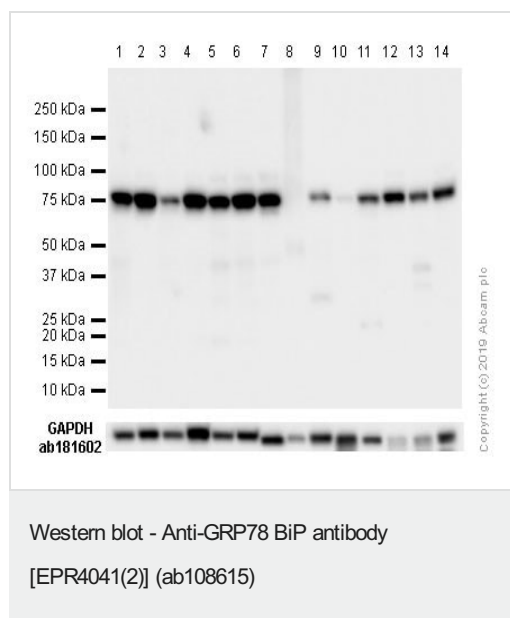
Immunohistochemical staining of paraffin embedded human hepatocellular carcinoma with purified ab108615 at a working dilution of 1/500. The secondary antibody used is HRP goat anti-rabbit IgG H&L ([ab97051](#)) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GRP78 BiP antibody [EPR4041(2)] (ab108615)

Unpurified ab108615 at 1/50 dilution staining GRP78 BiP in Human breast carcinoma tissue by Immunohistochemistry Formalin-fixed, Paraffin-embedded tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



**All lanes :** Anti-GRP78 BiP antibody [EPR4041(2)] (ab108615) at 1/1000 dilution

**Lane 1 :** MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysates

**Lane 2 :** HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysates

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

**Lane 4 :** U-87 MG (Human glioblastoma-astrocytoma epithelial cell) whole cell lysates

**Lane 5 :** THP-1 (Human monocytic leukemia monocyte) whole cell lysates

**Lane 6 :** MDA-MB-231 (Human breast adenocarcinoma epithelial cell) whole cell lysates

**Lane 7 :** NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates

**Lane 8 :** Human uterus lysates

**Lane 9 :** Human liver lysates

**Lane 10 :** Mouse heart lysates

**Lane 11 :** Mouse lung lysates

**Lane 12 :** Mouse testis lysates

**Lane 13 :** Mouse liver lysates

**Lane 14 :** Rat liver lysates

Lysates/proteins at 20 µg per lane.

### Secondary

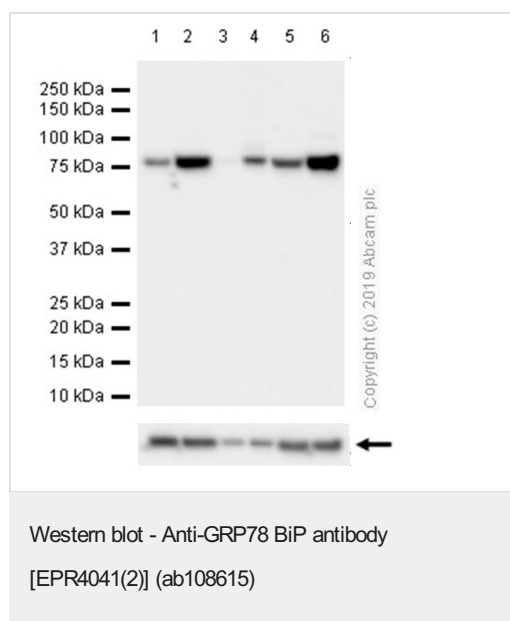
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 72 kDa

**Observed band size:** 78 kDa

**Exposure time:** 26 seconds

Blocking/Diluting buffer and concentration: 5% NFDM/TBST



**All lanes :** Anti-GRP78 BiP antibody [EPR4041(2)] (ab108615) at 1/1000 dilution

**Lane 1 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

**Lane 2 :** HeLa treated with 2.5 µg/ml tunicamycin for 24h whole cell lysates

**Lane 3 :** HUVEC (Human umbilical vein endothelial cell) whole cell lysates

**Lane 4 :** HUVEC treated with 10 µg/ml tunicamycin for 48h whole cell lysates

**Lane 5 :** Raw 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysates

**Lane 6 :** Raw 264.7 treated with 5 µg/ml tunicamycin for 18h whole cell lysates

Lysates/proteins at 20 µg per lane.

### Secondary

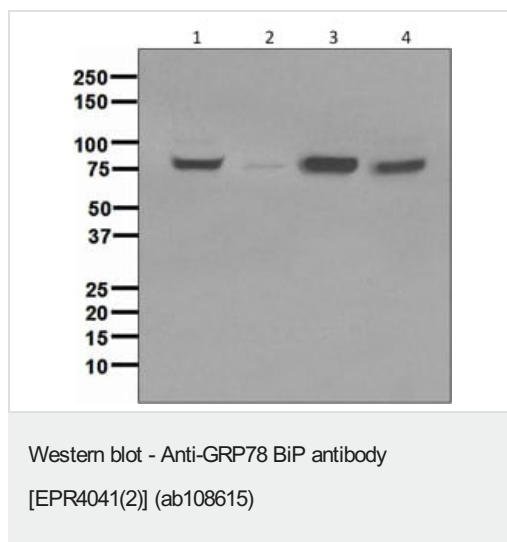
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 72 kDa

**Observed band size:** 78 kDa

**Exposure time:** 3 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST



**All lanes :** Anti-GRP78 BiP antibody [EPR4041(2)] (ab108615) at 1/1000 dilution (unpurified)

**Lane 1 :** HeLa cell lysates

**Lane 2 :** NIH/3T3 cell lysates

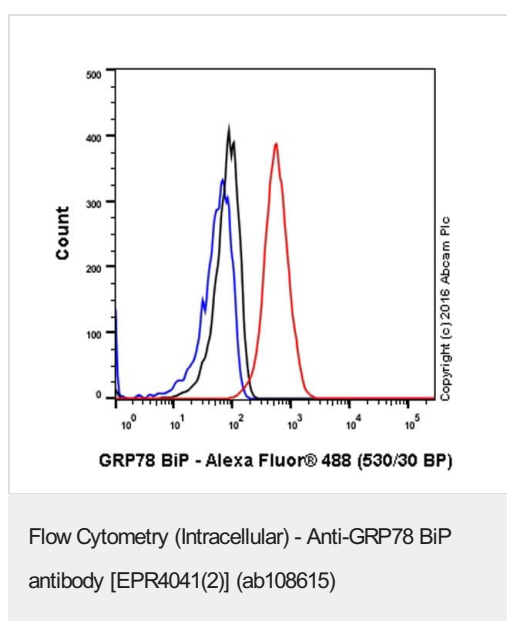
**Lane 3 :** LnCaP cell lysates

**Lane 4 :** HepG2 cell lysates

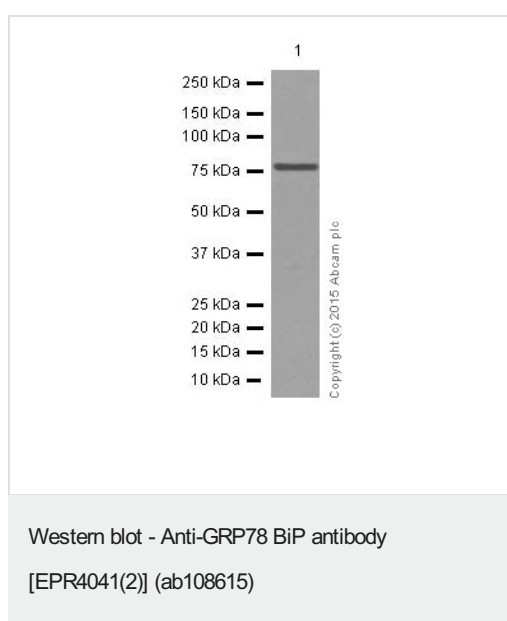
### Secondary

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

**Predicted band size:** 72 kDa



Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling GRP78 BiP with purified ab108615 at 1/200 dilution (10ug/mL) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



Anti-GRP78 BiP antibody [EPR4041(2)] (ab108615) at 1/1000 dilution (purified) + Raw264.7 cell lysate at 20 µg

### Secondary

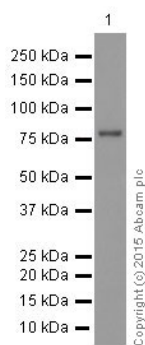
HRP goat anti-rabbit IgG (H+L) at 1/50000 dilution

**Predicted band size:** 72 kDa

**Observed band size:** 78 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



Western blot - Anti-GRP78 BiP antibody  
[EPR4041(2)] (ab108615)

Anti-GRP78 BiP antibody [EPR4041(2)] (ab108615) at 1/5000  
dilution (purified) + HepG2 at 20 µg

### Secondary

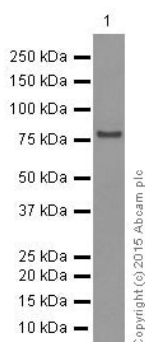
HRP goat anti-rabbit IgG (H+L) at 1/50000 dilution

**Predicted band size:** 72 kDa

**Observed band size:** 78 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



Western blot - Anti-GRP78 BiP antibody  
[EPR4041(2)] (ab108615)

Anti-GRP78 BiP antibody [EPR4041(2)] (ab108615) at 1/1000  
dilution (purified) + LnCaP at 20 µg

### Secondary

HRP goat anti-rabbit IgG (H+L) at 1/50000 dilution

**Predicted band size:** 72 kDa

**Observed band size:** 78 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST

### 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-GRP78 BiP antibody [EPR4041(2)] (ab108615)



**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