

# Anti-EEA1 antibody [EPR4245] - Early Endosome Marker ab109110

敲除验证 重组 RabMAb

★★★★★ [4 Abreviews](#) [13 References](#) [5 图像](#)

### 概述

产品名称	Anti-EEA1抗体[EPR4245] - Early Endosome Marker
描述	兔单克隆抗体[EPR4245] to EEA1 - Early Endosome Marker
宿主	Rabbit
经测试应用	<b>适用于:</b> ICC/IF, WB <b>不适用于:</b> IP
种属反应性	<b>与反应:</b> Mouse, Rat, Human, African green monkey
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: COS-1, NIH 3T3, C6, HeLa, Jurkat, Daudi, SH-SY5Y and JAR cell lysates. ICC/IF: JAR cells.
常规说明	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 <a href="#">see here</a> . 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> .

### 性能

形式	Liquid
存放说明	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.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
纯度	Protein A purified
克隆	单克隆

克隆编号 EPR4245  
同种型 IgG

## 应用

**The Abpromise guarantee** **Abpromise™** 承诺保证使用 ab109110 于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度；实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF	★★★★★ (1)	1/500 - 1/1000.
WB	★★★★★ (2)	1/10000 - 1/50000. Detects a band of approximately 170 kDa (predicted molecular weight: 162 kDa).

应用说明 Is unsuitable for IP.

## 靶标

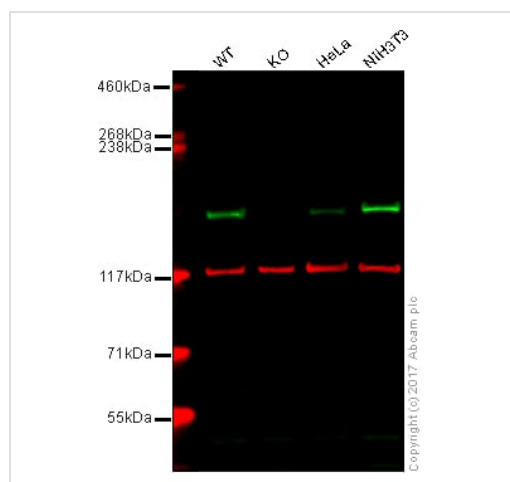
**功能** Binds phospholipid vesicles containing phosphatidylinositol 3-phosphate and participates in endosomal trafficking.

**序列相似性** Contains 1 C2H2-type zinc finger.  
Contains 1 FYVE-type zinc finger.

**结构域** The FYVE-type zinc finger domain mediates interactions with phosphatidylinositol 3-phosphate in membranes of early endosomes and penetrates bilayers. The FYVE domain insertion into PtdIns(3)P-enriched membranes is substantially increased in acidic conditions.

**细胞定位** Cytoplasm. Early endosome membrane.

## 图片



Western blot - Anti-EEA1 antibody [EPR4245] - Early Endosome Marker (ab109110)

**Lane 1:** Wild-type HAP1 whole cell lysate (20 µg)

**Lane 2:** Early Endosome Marker knockout HAP1 whole cell lysate (20 µg)

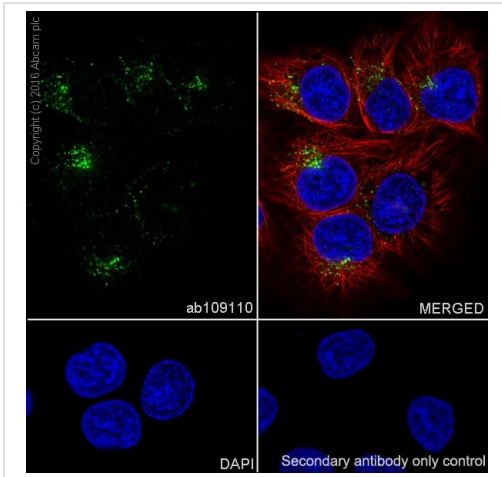
**Lane 3:** HeLa whole cell lysate (20 µg)

**Lane 4:** NIH3T3 whole cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab109110 observed at 162 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

ab109110 was shown to recognize Early Endosome Marker in wild-type HAP1 cells as signal was lost at the expected MW in Early Endosome Marker knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and Early Endosome Marker knockout samples were subjected to SDS-PAGE. Ab109110 and **ab18058** (Mouse anti-Vinculin loading

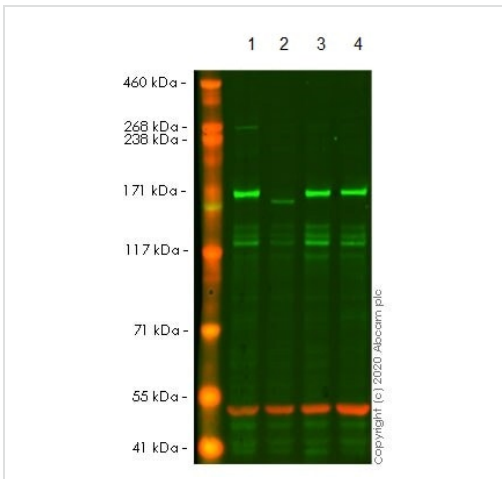
control) were incubated overnight at 4°C at 1/10000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-EEA1 antibody [EPR4245] - Early Endosome Marker (ab109110)

Immunocytochemistry/Immunofluorescence analysis of JAR (human placenta choriocarcinoma epithelial) cells labelling EEA1 with ab109110 at a dilution of 1/250. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% TritonX-100. **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG was used as the secondary antibody at a dilution of 1/1000. Counterstained with DAPI and **ab195889**, anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594), at a dilution of 1/200.

Image shows cytoplasmic staining in JAR cell line.



Western blot - Anti-EEA1 antibody [EPR4245] - Early Endosome Marker (ab109110)

**All lanes :** Anti-EEA1 antibody [EPR4245] - Early Endosome Marker (ab109110) at 1/1000 dilution

**Lane 1 :** Wild-type HeLa cell lysate

**Lane 2 :** EEA1 CRISPR/Cas9 edited HeLa cell lysate

**Lane 3 :** Daudi cell lysate

**Lane 4 :** SH-SY5Y cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

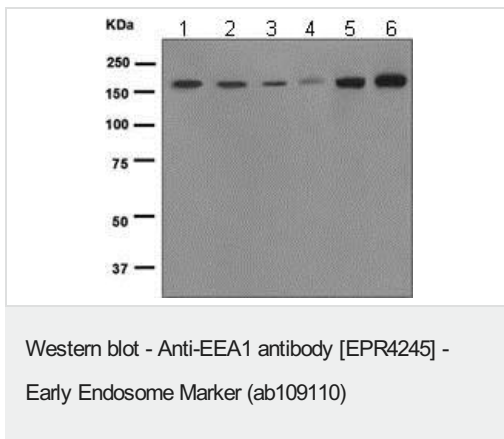
**Predicted band size:** 162 kDa

**Observed band size:** 175 kDa

**Lanes 1- 4:** Merged signal (red and green). Green - ab109110 observed at 175 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) observed at 37 kDa.

ab109110 was shown to react with EEA1 in wild-type HeLa cells in

western blot. The band observed in CRISPR/Cas9 edited cell line [ab261822](#) (CRISPR/Cas9 edited cell lysate [ab256897](#)) lane below 175kDa may represent truncated forms and cleaved fragments. This has not been investigated further. Wild-type HeLa and EEA1 CRISPR/Cas9 edited HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab109110 and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated overnight at 4°C at a 1 in 10000 dilution and a 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 20000 dilution for 1 hour at room temperature before imaging.



**All lanes :** Anti-EEA1 antibody [EPR4245] - Early Endosome Marker (ab109110) at 1/10000 dilution

- Lane 1 :** COS-1 cell lysate
- Lane 2 :** NIH 3T3 cell lysate
- Lane 3 :** C6 cell lysate
- Lane 4 :** HeLa cell lysate
- Lane 5 :** Jurkat cell lysate
- Lane 6 :** JAR cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

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

**Predicted band size:** 162 kDa

**Observed band size:** 170 kDa

### 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-EEA1 antibody [EPR4245] - Early Endosome Marker (ab109110)

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

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