

## Product datasheet

# Anti-CD44 antibody [EPR1013Y] ab51037

**重组** RabMAb

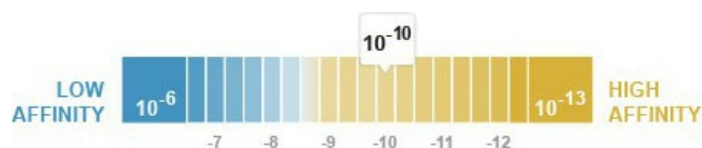
★★★★☆ 10 Abreviews 70 References 11 图像

### 概述

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>产品名称</b>  | Anti-CD44抗体[EPR1013Y]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>描述</b>    | 兔单克隆抗体[EPR1013Y] to CD44                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>宿主</b>    | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>经测试应用</b> | <b>适用于:</b> IHC-P, IHC-Fr, WB, Flow Cyt<br><b>不适用于:</b> IP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>种属反应性</b> | <b>与反应:</b> Human<br><b>不与反应:</b> Mouse, Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>免疫原</b>   | Synthetic peptide within Human CD44 aa 150-250. The exact sequence is proprietary.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>阳性对照</b>  | Recombinant Human CD44 protein ( <a href="#">ab114154</a> ) can be used as a positive control in WB. TF-1 cell lysate or human urinary bladder tissue.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>常规说明</b>  | 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><br><br><b>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.</b><br><br>This product is a recombinant rabbit monoclonal antibody. |

### 性能

|                             |                                                                                                                         |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>形式</b>                   | Liquid                                                                                                                  |
| <b>存放说明</b>                 | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. |
| <b>解离常数 (K<sub>D</sub>)</b> | K <sub>D</sub> = 3.76 x 10 <sup>-10</sup> M                                                                             |



[Learn more about K<sub>D</sub>](#)

|      |                                                                                               |
|------|-----------------------------------------------------------------------------------------------|
| 存储溶液 | pH: 7.20<br>Preservative: 0.01% Sodium azide<br>Constituents: 59% PBS, 40% Glycerol, 0.5% BSA |
| 纯度   | Protein A purified                                                                            |
| 克隆   | 单克隆                                                                                           |
| 克隆编号 | EPR1013Y                                                                                      |
| 同种型  | IgG                                                                                           |

## 应用

Our [Abpromise guarantee](#) covers the use of **ab51037** in the following tested applications.

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

| 应用       | Ab评论  | 说明                                                                                                                           |
|----------|-------|------------------------------------------------------------------------------------------------------------------------------|
| IHC-P    | ★★★★★ | 1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. |
| IHC-Fr   |       | Use at an assay dependent concentration.                                                                                     |
| WB       | ★★★★☆ | 1/5000. Detects a band of approximately 82 kDa (predicted molecular weight: 82 kDa).                                         |
| Flow Cyt | ★★★★☆ | 1/30.<br><a href="#">ab172730</a> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.     |

**应用说明** Is unsuitable for IP.

## 靶标

**功能** Receptor for hyaluronic acid (HA). Mediates cell-cell and cell-matrix interactions through its affinity for HA, and possibly also through its affinity for other ligands such as osteopontin, collagens, and matrix metalloproteinases (MMPs). Adhesion with HA plays an important role in cell migration, tumor growth and progression. Also involved in lymphocyte activation, recirculation and homing, and in hematopoiesis. Altered expression or dysfunction causes numerous pathogenic phenotypes. Great protein heterogeneity due to numerous alternative splicing and post-translational modification events.

**组织特异性** Isoform 10 (epithelial isoform) is expressed by cells of epithelium and highly expressed by carcinomas. Expression is repressed in neuroblastoma cells.

**序列相似性** Contains 1 Link domain.

**结构域** The lectin-like LINK domain is responsible for hyaluronan binding.

**翻译后修饰** Proteolytically cleaved in the extracellular matrix by specific proteinases (possibly MMPs) in several cell lines and tumors.

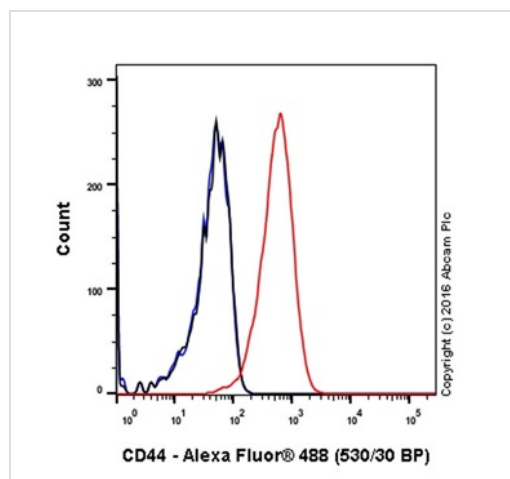
N-glycosylated.

O-glycosylated; contains more-or-less-sulfated chondroitin sulfate glycans, whose number may affect the accessibility of specific proteinases to their cleavage site(s).

Phosphorylated; activation of PKC results in the dephosphorylation of Ser-706 (constitutive phosphorylation site), and the phosphorylation of Ser-672.

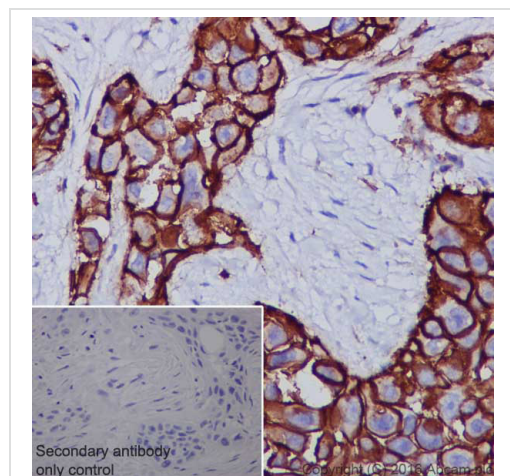
**细胞定位** Membrane.

## 图片



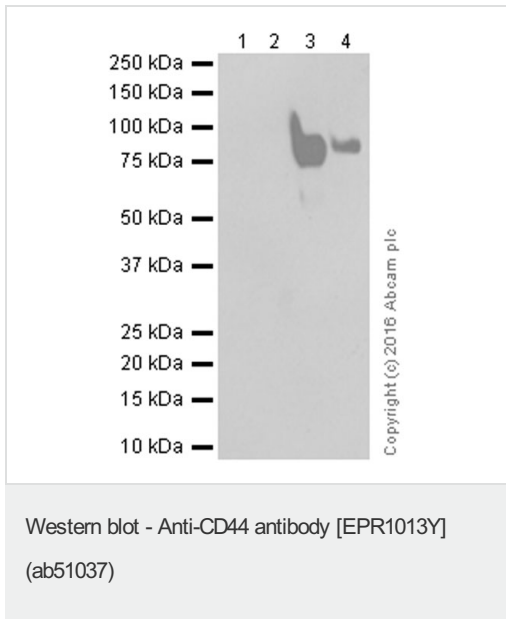
Flow Cytometry - Anti-CD44 antibody [EPR1013Y]  
(ab51037)

ab51037 used at a 1/200 dilution (red) to detect CD44 in human MDA-MB-231 cells by Flow Cytometry. The secondary used was a Pgoat anti-rabbit IgG (Alexa Fluor® 488) polyclonal used at a 1/2000 dilution. Isotype control (black): Rabbit monoclonal IgG (ab172730). Unlabelled control (Blue): Cell without incubation with primary antibody and secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD44 antibody [EPR1013Y] (ab51037)

Immunohistochemical analysis of paraffin-embedded human pancreatic cancer tissue labeling CD44 with ab51037 at 1/100 dilution followed by goat anti-rabbit IgG H&L (HRP) (ab97051, 1/500). The sample was counter stained with hematoxylin.



**All lanes** : Anti-CD44 antibody [EPR1013Y] (ab51037) at 1/1000 dilution

**Lane 1** : MCF-7 whole cell lysate

**Lane 2** : Jurkat whole cell lysate

**Lane 3** : MDA-MB-231 whole cell lysate

**Lane 4** : HeLa whole cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

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

**Predicted band size:** 82 kDa

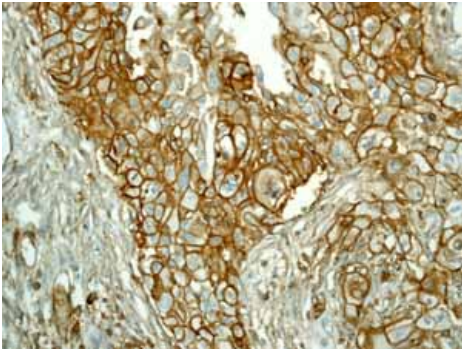
**Observed band size:** 81 kDa

[why is the actual band size different from the predicted?](#)

**Exposure time:** 3 minutes

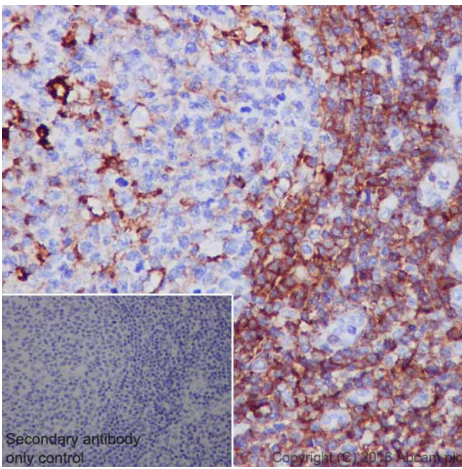
Blocking and diluting buffer 5% NFDm/TBST

The expression of CD44 in MCF-7 is low (PMID: 25635866; PMID: 26005723). Jurkat does not express CD44 (PMID: 24127558).



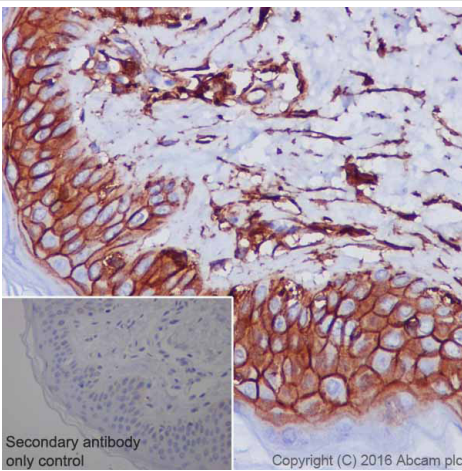
ab51037 (1:100) showing positive staining in human Breast carcinoma tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD44 antibody [EPR1013Y] (ab51037)



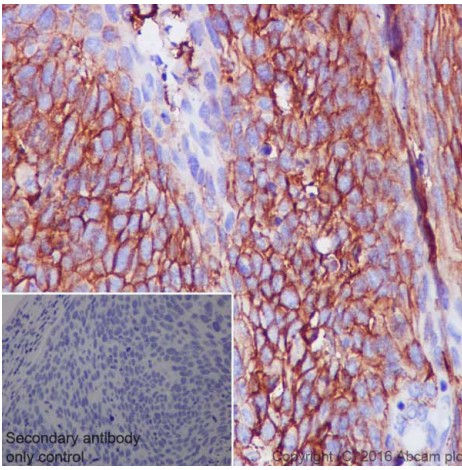
Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling CD44 with ab51037 at 1/100 dilution followed by goat anti-rabbit IgG H&L (HRP) (ab97051, 1/500). The sample was counter stained with hematoxylin.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD44 antibody [EPR1013Y] (ab51037)



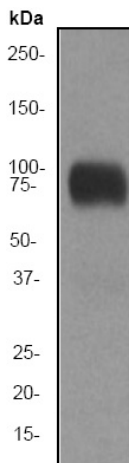
Immunohistochemical analysis of paraffin-embedded human skin tissue labeling CD44 with ab51037 at 1/100 dilution followed by goat anti-rabbit IgG H&L (HRP) (ab97051, 1/500). The sample was counter stained with hematoxylin.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD44 antibody [EPR1013Y] (ab51037)



Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue labeling CD44 with ab51037 at 1/100 dilution followed by goat anti-rabbit IgG H&L (HRP) (ab97051, 1/500). The sample was counter stained with hematoxylin.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD44 antibody [EPR1013Y] (ab51037)



Anti-CD44 antibody [EPR1013Y] (ab51037) at 1/5000 dilution + TF-1 cell lysate at 10 µg

**Secondary**

Goat anti-Rabbit HRP labeled. at 1/2000 dilution

**Predicted band size:** 82 kDa

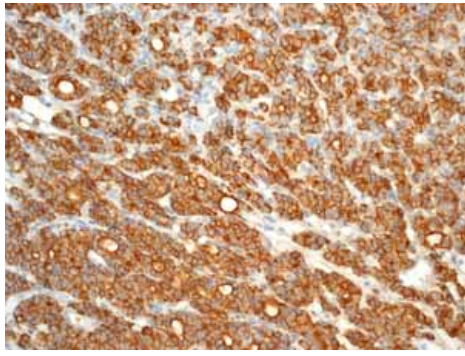
**Observed band size:** 82 kDa

Western blot - Anti-CD44 antibody [EPR1013Y] (ab51037)



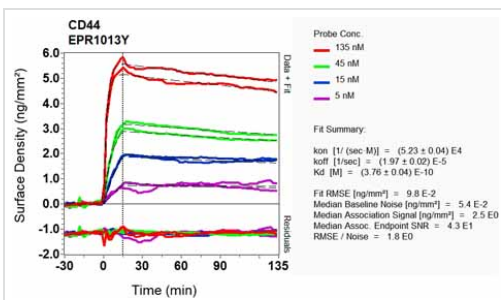
ab51037 (1:100) showing positive staining in human Glioma tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD44 antibody [EPR1013Y] (ab51037)



ab51037 (1:100) showing positive staining in human Thyroid gland carcinoma tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD44 antibody [EPR1013Y] (ab51037)



Other - Anti-CD44 antibody [EPR1013Y] (ab51037)

Equilibrium disassociation constant ( $K_D$ )

Learn more about  $K_D$

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

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