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订货热线：400-168-3301或800-8283301
订货e-mail：order@beyotime.com
技术咨询：info@beyotime.com
网址：http://www.beyotime.com

# β-Actin Mouse Monoclonal Antibody

| 产品编号 | 产品名称 | 包装 |
|---|---|---|
| AF0003 | β-Actin Mouse Monoclonal Antibody | 100μl |

## 产品简介：

| 来源 | 用途 | 交叉反应性 | 分子量 |
|---|---|---|---|
| Mouse | WB, ICC, IHC | H, M, R | 43KDa |

WB, Western blot; IP, Immunoprecipitation; IF, Immunofluorescence; IHC, Immunohistochemistry; ICC, Immunocytochemistry; FC, Flow Cytometry; ELISA, Enzyme-linked Immunosorbent Assay; ChIP, Chromatin Immunoprecipitation Assay.
H, Human; M, Mouse; R, Rat; C, Chicken; Cw, Cow; Dg, Dog; Gp, Guinea pig; Hm, Hamster; Hr, Horse; Mk, Monkey; Pg, Pig; Rb, Rabbit; S, Sheep; Z, Zebrafish; All, all species expected.

- 配套提供了Western一抗稀释液，可以用于Western检测或其它适当用途时的一抗稀释。
- 建议抗体使用时的稀释比例如下(实际使用时需根据抗原水平的高低作适当调整)：

| WB | IP | IF | IHC | ICC | FC | ELISA | ChIP |
|---|---|---|---|---|---|---|---|
| 1:1000 | - | 1:20 | 1:20 | 1:20 | - | - | - |

- **抗体详细信息如下：**

| **About this Antibody** | |
|---|---|
| Name | β-Actin Mouse Monoclonal Antibody |
| Category | Monoclonal antibody (mAb); Primary antibody |
| Isotype | IgG1 |
| Purification | Affinity chromatography |
| **About the Immunogen** | |
| Immunogen | synthetic peptide (KLH-coupled) |
| Gene ID | 60/11461/81822 |
| SwissProt | P60709/P60710/P60711 |
| Synonyms | BRWS1; PS1TP5BP1 |
| Category | Cytoskeletal Signaling |
| Background | Beta actin also know as Cytoplasmic Actin is a 43 kDa, highly conserved protein, ubiquitously expressed in all eukaryotic cells. They comprise, along with microtubules, a major component of the cytoskeleton. β-Actin is a relatively stable cytoskeletal protein normally at a constant level in cells, regardless of experimental treatment or technical procedure. For this reason, measurement of β-Actin is generally used as an internal control for experimental error. |

## 包装清单：

| 产品编号 | 产品名称 | 包装 |
|---|---|---|
| AF0003 | β-Actin Mouse Monoclonal Antibody | 100μl |
| AZ100 | Western一抗稀释液 | 100ml |
| — | 说明书 | 1份 |

## 保存条件：

β-Actin Mouse Monoclonal Antibody -20ºC保存，Western一抗稀释液-20ºC或4ºC保存，一年有效。Western一抗稀释液优先推荐4ºC保存，长期不使用可以考虑-20ºC保存，但冻融可能会导致出现轻微的浑浊和少量不溶物。

## 注意事项：

- 如果本抗体用于Western blot (WB)、免疫荧光(IF)、免疫细胞化学(ICC)等实验，请注意回收使用过的稀释抗体。回收的抗体通常至少可以重复使用5-10次。稀释后的抗体，包括已经使用过的稀释抗体，请4ºC保存。
- 回收后重复使用的抗体，使用方法同新鲜稀释的抗体。如果在重复使用过程中发现抗体出现轻微混浊现象，可以10,000g离心1-3分钟，取上清用于后续检测。如果回收的抗体出现明显的絮状物或长霉长菌等情况，则可以考虑废弃该抗体。
- 提供的Western一抗稀释液也可以用于免疫荧光(IF)、免疫组化(IHC)、免疫细胞化学(ICC)等适当用途。如果希望获得最佳

的检测效果，请考虑使用上述检测专用的一抗稀释液。

- 本产品仅限于专业人员的科学研究用，不得用于临床诊断或治疗，不得用于食品或药品，不得存放于普通住宅内。
- 为了您的安全和健康，请穿实验服并戴一次性手套操作。

## 使用说明：

**请根据抗体的实际用途选择相应的使用方法。**

1. **Western检测：**
   a. 按照推荐的稀释比例用碧云天提供的Western一抗稀释液稀释抗体。
   b. 把经过封闭的蛋白膜与稀释好的一抗4ºC缓慢摇动过夜或室温缓慢摇动2小时，确保稀释的抗体至少能在摇动的瞬间覆盖蛋白膜。
   c. 回收稀释的一抗，4ºC保存以备下次继续使用。
   d. 按照Western的实验步骤进行后续的洗涤、二抗孵育、洗涤和检测等操作。具体操作可以参考如下网页：
   http://www.beyotime.com/support/western.htm
2. **免疫染色：**
   可以使用碧云天生产的免疫染色一抗稀释液(P0103)稀释抗体，使用后注意回收稀释好的一抗，具体操作可以参考如下网页： http://www.beyotime.com/support/immunol-staining.htm
3. **其它实验操作请自行参考适当的protocol进行。**
4. **代表性图片：**

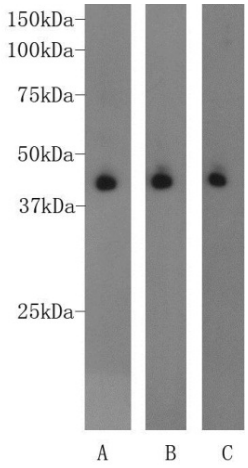



Fig. 1. Western blot analysis on Hela (A), NIH/3T3 (B) and PC12 (C) cell lysates using β-actin mouse monoclonal antibody (AF003).

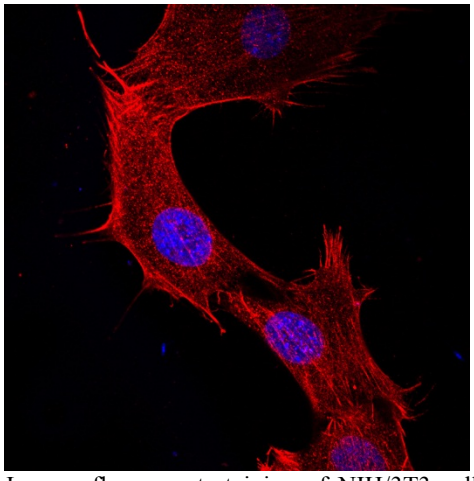


Fig. 2. Immunofluorescent staining of NIH/3T3 cells using β-actin mouse monoclonal antibody (AF0003). Nucleus (blue) were stained with DAPI.

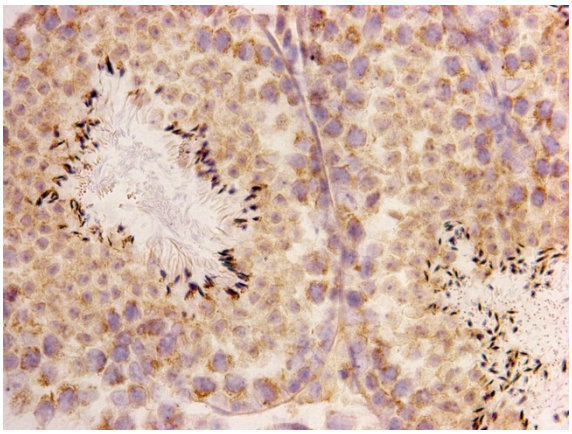


Fig. 3. Immunohistochemical analysis of paraffin-embedded mouse testis tissue using β-actin mouse monoclonal antibody (AF0003).

## 相关产品：

| 产品编号 | 产品名称 | 包装 |
|---|---|---|
| P0006 | Bradford蛋白浓度测定试剂盒 | 1000次 |
| P0010 | BCA蛋白浓度测定试剂盒(增强型) | 500次 |
| P0012 | BCA蛋白浓度测定试剂盒 | 500次 |
| P0012A | SDS-PAGE凝胶配制试剂盒 | 1盒 |
| P0012AC | SDS-PAGE凝胶快速配制试剂盒 | 1盒 |
| P0013 | Western及IP细胞裂解液 | 100ml |

| | | |
|---|---|---|
| P0013B | RIPA裂解液(强) | 100ml |
| P0014B | SDS-PAGE电泳液 | 10×1L |
| P0015 | SDS-PAGE蛋白上样缓冲液(5X) | 2ml |
| P0018 | BeyoECL Plus(超敏ECL化学发光试剂盒) | 共100ml |
| P0018A | BeyoECL Star(特超敏ECL化学发光试剂盒) | 共100ml |
| P0020 | 显影定影试剂盒 | 各1升 |
| P0021B | Western转膜液 | 10×1L |
| P0023A | Western一抗稀释液 | 100ml |
| P0023B | Western封闭液 | 100ml |
| P0023C6 | Western洗涤液(10X) | 10×100ml |
| P0023D | Western二抗稀释液 | 100ml |
| P0025 | Western一抗二抗去除液 | 250ml |
| P0252 | QuickBlock™ Western封闭液 | 100ml |
| P0256 | QuickBlock™ Western一抗稀释液 | 100ml |
| P0258 | QuickBlock™ Western二抗稀释液 | 100ml |
| P0066 | 预染蛋白质分子量标准 | 200μl |
| P0068 | 彩色预染蛋白质分子量标准 | 200μl |
| P0071 | BeyoColor™彩色预染蛋白质分子量标准 | 200μl |
| P0098 | 免疫染色固定液 | 100ml |
| P0102 | 免疫染色封闭液 | 100ml |
| P0103 | 免疫染色一抗稀释液 | 100ml |
| P0106L | 免疫染色洗涤液(10X) | 10×100ml |
| P0108 | 免疫荧光染色二抗稀释液 | 100ml |
| P0110 | 免疫染色(非荧光)二抗稀释液 | 100ml |
| P0260 | QuickBlock™免疫染色封闭液 | 100ml |
| P0262 | QuickBlock™免疫染色一抗稀释液 | 100ml |
| P0265 | QuickBlock™免疫荧光染色二抗稀释液 | 100ml |
| P0267 | QuickBlock™免疫组化染色二抗稀释液 | 100ml |
| P0126 | 抗荧光淬灭封片液 | 5ml |
| FFP24 | PVDF膜(进口分装, 6.6×8.5cm, 0.2μm) | 20张/包装 |
| FFP32 | PVDF膜(进口原装，6.6×8.5cm, 0.45μm) | 20张/包装 |
| FFP51 | 转印滤纸(7.5×10cm) | 100片/包装 |
| FF057 | X-OMAT BT胶片(原柯达, 5×7英寸) | 100张/盒 |
| FFC58 | 压片暗盒(5×7英寸) | 1个 |

Version 2016.04.26

For Research Use Only

# KEAP1 Polyclonal antibody

Catalog Number:10503-2-AP Featured Product 394 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

## Basic Information

Catalog Number:
10503-2-AP

Size:
600 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG0779

GenBank Accession Number:
BC002930

GeneID (NCBI):
9817

Full Name:
kelch-like ECH-associated protein 1

Calculated MW:
624 aa, 70 kDa

Observed MW:
55-70 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:2000-1:10000
IP 0.5-4.0 ug for IP and 1:500-1:1000 for WB
IHC 1:50-1:500

## Applications

Tested Applications:
IHC, IP, WB, ELISA

Cited Applications:
CoIP, IF, IHC, IP, WB

Species Specificity:
human, mouse, rat

Cited Species:
bovine, chicken, human, monkey, mouse, pig, rat, yellow catfish

***Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0***

Positive Controls:

WB : HEK-293 cells, HepG2 cells, Jurkat cells, MCF-7 cells, HeLa cells

IP : mouse skeletal muscle tissue,

IHC : human lung cancer tissue, human breast cancer tissue, human skeletal muscle tissue

## Background Information

KEAP1, also named as INRF2, KIAA0132 and KLHL19, is part of a multiprotein complex that contains the CUL3-ROC1 ubiquitin ligase, which can ubiquitinate the N-terminal domain of NRF2[PMID: 20173742]. Two molecules of KEAP1 bind to two distinct sites in the N-terminal region of NRF2, the ETGE and DLG sites, which affect the KEAP1-NRF2 interaction and/or its physiological consequences[PMID: 22215675]. KEAP1 retains NFE2L2/NRF2 in the cytosol. It functions as substrate adapter protein for the E3 ubiquitin ligase complex formed by CUL3 and RBX1[PMID: 20427290]. It also retains BPTF in the cytosol. This antibody is a rabbit polyclonal antibody raised against residues near the C terminus of human KEAP1.

## Notable Publications

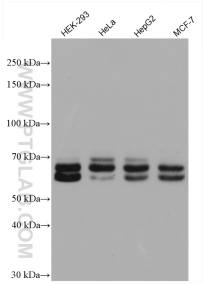
| Author | Pubmed ID | Journal | Application |
|---|---|---|---|
| Lin-Tao Xu | 34601084 | J Ethnopharmacol | WB |
| Jie Deng | 34565300 | Bioengineered | WB |
| Elisabetta Beneduce | 30252956 | Am J Hematol | WB |

## Storage

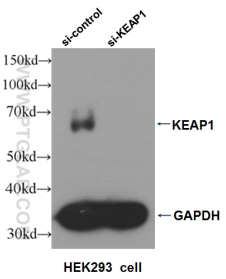
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

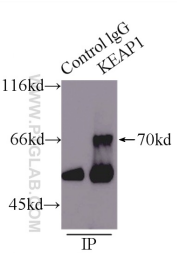
## Selected Validation Data



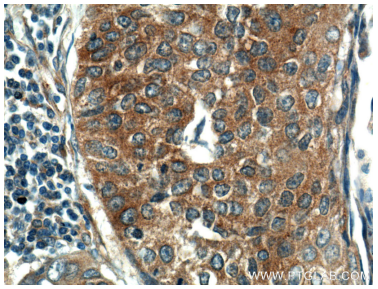

Various lysates were subjected to SDS PAGE followed by western blot with 10503-2-AP (KEAP1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



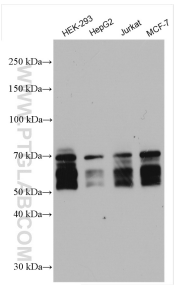

WB result of KEAP1 antibody (10503-2-AP, 1:2000) with si-control and si-KEAP1 transfected HEK293 cell.



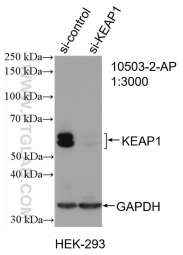

IP Result of anti-KEAP1 (IP:10503-2-AP, 5ug; Detection:10503-2-AP 1:600) with mouse skeletal muscle tissue lysate 8000ug.



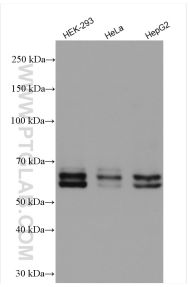
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 10503-2-AP (KEAP1 Antibody) at dilution of 1:200 (under 10x lens).




Various lysates were subjected to SDS PAGE followed by western blot with 10503-2-AP (KEAP1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.




WB result of KEAP1 antibody (10503-2-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-KEAP1 transfected HEK-293 cells.




Various lysates were subjected to SDS PAGE followed by western blot with 10503-2-AP (KEAP1 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.

For Research Use Only

# NRF2, NFE2L2 Polyclonal antibody

Catalog Number:16396-1-AP Featured Product 852 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

## Basic Information

Catalog Number:
16396-1-AP

Size:
700 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG9489

GenBank Accession Number:
BC011558

GeneID (NCBI):
4780

Full Name:
nuclear factor (erythroid-derived 2)-like 2

Calculated MW:
605 aa, 68 kDa

Observed MW:
110 kDa, 68 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:5000-1:50000
IP 0.5-4.0 ug for IP and 1:200-1:1000 for WB
IHC 1:50-1:500
IF 1:50-1:500

## Applications

Tested Applications:
FC, IF, IHC, IP, WB, ELISA

Cited Applications:
chIP, CoIP, IF, IHC, IP, WB

Species Specificity:
human, mouse, rat

Cited Species:
Bovine, canine, chicken, ducks, hamster, human, monkey, mouse, pig, rabbit

***Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0***

Positive Controls:

WB : A549 cells, DMSO treated HeLa cells, rat liver tissue, HepG2 cells

IP : mouse kidney tissue,

IHC : human ovary tumor tissue, human breast cancer tissue, human colon cancer tissue, human kidney tissue, human liver cancer tissue, human renal cell carcinoma tissue

IF : HepG2 cells,

## Background Information

NRF2, also named as NFE2L2, belongs to the bZIP family and CNC subfamily. It is a transcription activator that binds to antioxidant response (ARE) elements in the promoter regions of target genes. NRF2 is important for the coordinated up-regulation of genes in response to oxidative stress. It may be involved in the transcriptional activation of genes of the beta-globin cluster by mediating enhancer activity of hypersensitive site 2 of the beta-globin locus control region. Nrf2 is a key player in the regulation of genes encoding for many antioxidative response enzymes.The expression of NRF2 may be induced under oxidative stress (PMID:14567983).In lung cancer, Nrf2 activation in malignant cells has been associated with tumor progression and chemotherapy resistance(PMID:20534738). Identifying patients with abnormal NRF2 expression may be important for selection for chemotherapy in NSCLC. As new investigators break into the emerging field of Nrf2 research, confusion regarding the correct migratory pattern of Nrf2 is causing doubts about the accuracy and reproducibility of published results. This letter provides solid evidence that the actually observed molecular weight of Nrf2 is about 70kDa and 95-110 kDa. (PMID: 22703241).

## Notable Publications

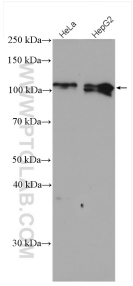
| Author | Pubmed ID | Journal | Application |
|---|---|---|---|
| Lin-Tao Xu | 34601084 | J Ethnopharmacol | WB |
| Dan Tang | 34815154 | Phytomedicine | WB,IF |
| Katarzyna Magierowska | 31568823 | Free Radic Biol Med | IHC |

## Storage

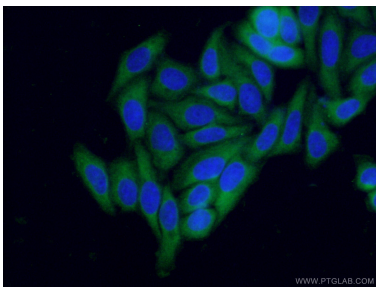
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

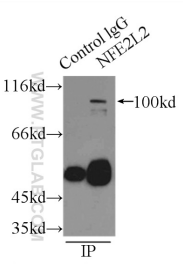
## Selected Validation Data



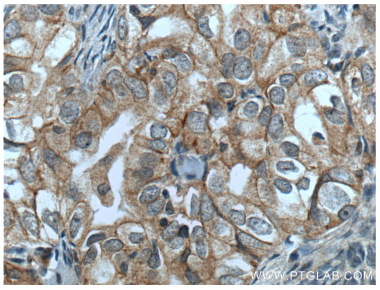

Various lysates were subjected to SDS PAGE followed by western blot with 16396-1-AP (NRF2, NFE2L2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



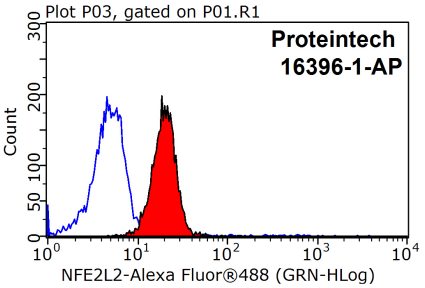

Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 16396-1-AP (NRF2, NFE2L2 antibody) at dilution of 1:50 and CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



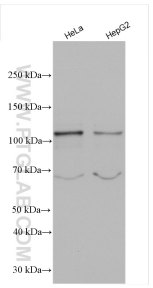

IP Result of anti-NRF2, NFE2L2 (IP:16396-1-AP, 3ug; Detection:16396-1-AP 1:300) with mouse kidney tissue lysate 4000ug.



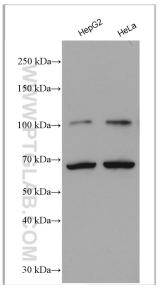

Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 16396-1-AP (NRF2, NFE2L2 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



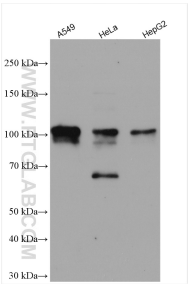

1X10^6 MCF-7 cells were stained with 0.2ug NRF2, NFE2L2 antibody (16396-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.




Various lysates were subjected to SDS PAGE followed by western blot with 16396-1-AP (NRF2, NFE2L2 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.




Various lysates were subjected to SDS PAGE followed by western blot with 16396-1-AP (NRF2, NFE2L2 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.




Various lysates were subjected to SDS PAGE followed by western blot with 16396-1-AP (NRF2, NFE2L2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.

Revision 1

Store at -20C

#4394

# β-TrCP (D13F10) Rabbit mAb

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| Applications: | Reactivity: | Sensitivity: | MW (kDa): | Source/Isotype: | UniProt ID: | Entrez-Gene Id: |
|---|---|---|---|---|---|---|
| WB, IP | H M R Mk | Endogenous | 62 | Rabbit IgG | Q9Y297 | 8945 |

## Product Usage Information

| Application | Dilution |
|---|---|
| Western Blotting | 1:1000 |
| Immunoprecipitation | 1:200 |

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

## Specificity / Sensitivity

β-TrCP (D13F10) Rabbit mAb detects endogenous levels of total β-TrCP protein. The antibody also recognizes a 40 kDa band of unknown origin.

**Species Reactivity:**
Human, Mouse, Rat, Monkey

## Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ile69 of human β-TrCP protein.

## Background

β-transducin repeat-containing protein (β-TrCP or FBW1A) is an F-box family protein characterized by the presence of the protein-protein mediating F-box domain first described in cyclin F. F-box proteins act as substrate adaptors that target proteins containing a specific phosphorylated sequence element, referred to as a phosphodegron, to the SCF E3 ubiquitin ligase complex for ubiquitination (1,2). β-TrCP targets many important proteins with diverse functions, such as p53, H-Ras, Smad4, IκBα, β-catenin, and the cell cycle checkpoint protein claspin, for ubiquitin-mediated degradation (3-5). Research studies have shown that inhibition of β-TrCP expression has a demonstrated benefit in the treatment of prostate cancer (6).

1. Bour, S. et al. (2001) *J Biol Chem* 276, 15920-8.
2. Kusmierczyk, A.R. and Hochstrasser, M. (2008) *Biol Chem* 389, 1143-51.
3. Wan, M. et al. (2004) *J Biol Chem* 279, 14484-7.
4. Mailand, N. et al. (2006) *Mol Cell* 23, 307-18.
5. Frescas, D. and Pagano, M. (2008) *Nat Rev Cancer* 8, 438-49.
6. Gluschnaider, U. et al. (2010) *PLoS One* 5, e9060.

**Species reactivity is determined by testing in at least one approved application (e.g., western blot).**

**IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.**

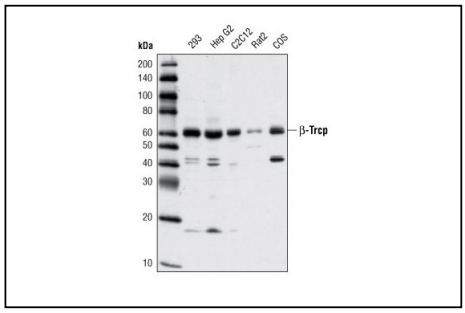
**APPLICATIONS KEY** **WB:** Western Blotting **IP:** Immunoprecipitation

**CROSS-REACTIVITY KEY** **H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **Rab:** rabbit **All:** all species expected

Revision 1

# #4394

# β-TrCP (D13F10) Rabbit mAb




Western blot analysis of extracts from various cell lines using β-TrCP (D13F10) Rabbit mAb.

# #4394

# β-TrCP (D13F10) Rabbit mAb

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Revision 3

Store at -20C

#23214

# SQSTM1/p62 (D6M5X) Rabbit mAb (Rodent Specific)

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**For Research Use Only. Not For Use In Diagnostic Procedures.**

| Applications: | Reactivity: | Sensitivity: | MW (kDa): | Source/Isotype: | UniProt ID: | Entrez-Gene Id: |
|---|---|---|---|---|---|---|
| WB, IP, IHC-P, IF-IC | M R | Endogenous | 62 | Rabbit IgG | Q64337 | 18412 |

## Product Usage Information

| Application | Dilution |
|---|---|
| Western Blotting | 1:1000 |
| Immunoprecipitation | 1:200 |
| Immunohistochemistry (Paraffin) | 1:125 - 1:500 |
| Immunofluorescence (Immunocytochemistry) | 1:400 - 1:1600 |

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

## Specificity / Sensitivity

SQSTM1/p62 (D6M5X) Rabbit mAb (Rodent Specific) recognizes endogenous levels of total rodent SQSTM1/p62 protein.

**Species Reactivity:**
Mouse, Rat

## Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly300 of mouse SQSTM1/p62 protein.

## Background

Sequestosome 1 (SQSTM1, p62) is a ubiquitin binding protein involved in cell signaling, oxidative stress, and autophagy (1-4). It was first identified as a protein that binds to the SH2 domain of p56Lck (5) and independently found to interact with PKCζ (6,7). SQSTM1 was subsequently found to interact with ubiquitin, providing a scaffold for several signaling proteins and triggering degradation of proteins through the proteasome or lysosome (8). Interaction between SQSTM1 and TRAF6 leads to the K63-linked polyubiquitination of TRAF6 and subsequent activation of the NF-κB pathway (9). Protein aggregates formed by SQSTM1 can be degraded by the autophagosome (4,10,11). SQSTM1 binds autophagosomal membrane protein LC3/Atg8, bringing SQSTM1-containing protein aggregates to the autophagosome (12). Lysosomal degradation of autophagosomes leads to a decrease in SQSTM1 levels during autophagy; conversely, autophagy inhibitors stabilize SQSTM1 levels. Studies have demonstrated a link between SQSTM1 and oxidative stress. SQSTM1 interacts with KEAP1, which is a cytoplasmic inhibitor of NRF2, a key transcription factor involved in cellular responses to oxidative stress (3). Thus, accumulation of SQSTM1 can lead to an increase in NRF2 activity.

1. Kirkin, V. et al. (2009) *Mol Cell* 34, 259-69.
2. Seibenhener, M.L. et al. (2007) *FEBS Lett* 581, 175-9.
3. Komatsu, M. et al. (2010) *Nat Cell Biol* 12, 213-23.
4. Bjørkøy, G. et al. (2006) *Autophagy* 2, 138-9.
5. Joung, I. et al. (1996) *Proc Natl Acad Sci USA* 93, 5991-5.
6. Sanchez, P. et al. (1998) *Mol Cell Biol* 18, 3069-80.
7. Puls, A. et al. (1997) *Proc Natl Acad Sci USA* 94, 6191-6.
8. Vadlamudi, R.K. et al. (1996) *J Biol Chem* 271, 20235-7.
9. Wooten, M.W. et al. (2005) *J Biol Chem* 280, 35625-9.
10. Bjørkøy, G. et al. (2005) *J Cell Biol* 171, 603-14.
11. Komatsu, M. et al. (2007) *Cell* 131, 1149-63.
12. Pankiv, S. et al. (2007) *J Biol Chem* 282, 24131-45.

**Species reactivity is determined by testing in at least one approved application (e.g., western blot).**

**IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.**

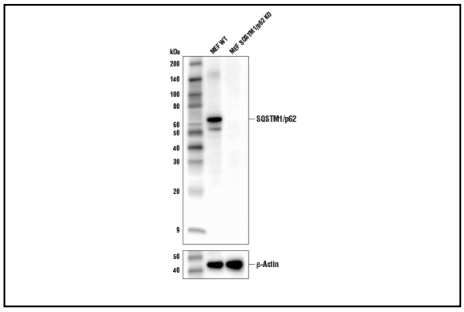
**APPLICATIONS KEY** **WB:** Western Blotting **IP:** Immunoprecipitation **IHC-P:** Immunohistochemistry (Paraffin) **IF-IC:** Immunofluorescence (Immunocytochemistry)

**CROSS-REACTIVITY KEY** **H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **Rab:** rabbit **All:** all species expected

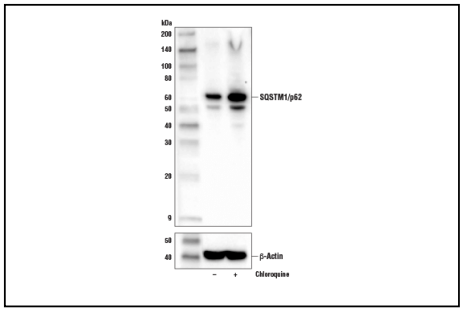
Revision 3

# #23214

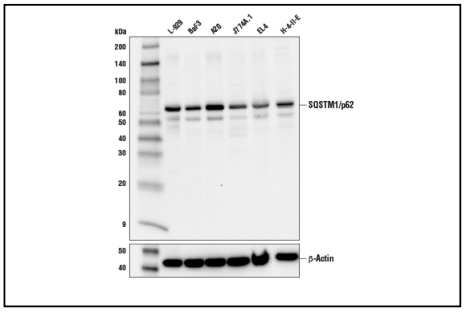
# SQSTM1/p62 (D6M5X) Rabbit mAb (Rodent Specific)



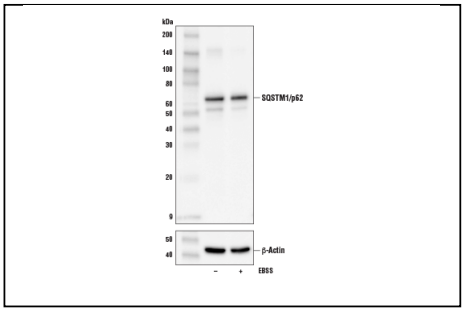

Western blot analysis of extracts from MEFs from wild-type or SQSTM1/p62 knockout mice using SQSTM1/p62 (D6M5X) Rabbit mAb (Rodent Specific) (upper) or β-Actin (D6A8) Rabbit mAb #8457 (lower). MEF SQSTM1/p62 KO cells were kindly provided by Dr. Junying Yuan, Harvard Medical School, Boston MA.



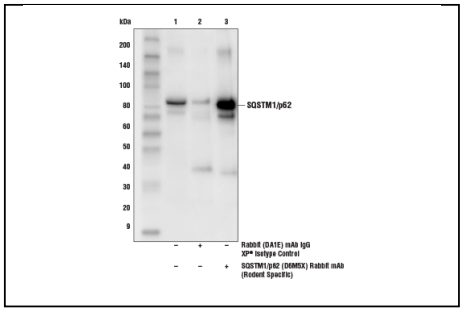

Western blot analysis of extracts from C2C12 cells, untreated (-) or treated with Chloroquine #14774 (50 µM, overnight) using SQSTM1/p62 (D6M5X) Rabbit mAb (Rodent Specific) (upper) or β-Actin (D6A8) Rabbit mAb #8457 (lower).



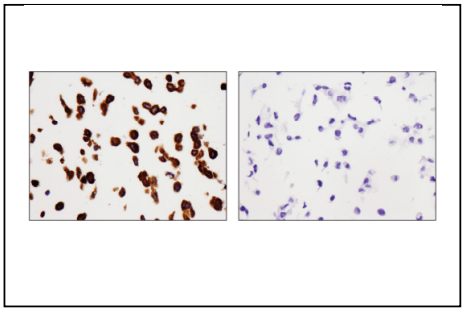

Western blot analysis of extracts from various cell lines using SQSTM1/p62 (D6M5X) Rabbit mAb (Rodent Specific).




Western blot analysis of extracts from MEFs, untreated (-) or treated with Earles Basic Salt Solution (EBSS; 4 hr; +) using SQSTM1/p62 (D6M5X) Rabbit mAb (Rodent Specific) (upper) or β-Actin (D6A8) Rabbit mAb #8457 (lower).




Immunoprecipitation of SQSTM1 from L-929 cell extracts. Lane 1 is 10% input, lane 2 is Rabbit (DA1E) mAb IgG XP® Isotype Control #3900, and lane 3 is SQSTM1/p62 (D6M5X) Rabbit mAb (Rodent Specific). Western blot was performed using SQSTM1/p62 (D6M5X) Rabbit mAb (Rodent Specific). Mouse Anti-rabbit IgG (Conformation Specific) (L27A9) mAb (HRP Conjugate) #5127 was used as a secondary antibody.

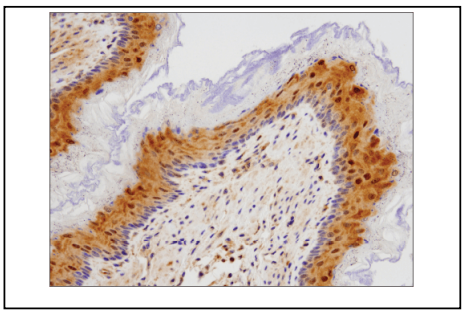


Immunohistochemical analysis of paraffin-embedded MEF wild-type cell pellet (left, positive) or MEF SQSTM1/p62 KO cell pellet (right, negative) using SQSTM1/p62 (D6M5X) Rabbit mAb (Rodent Specific). MEF SQSTM1/p62 KO cells were kindly provided by Dr. Junying Yuan, Harvard Medical School, Boston MA.

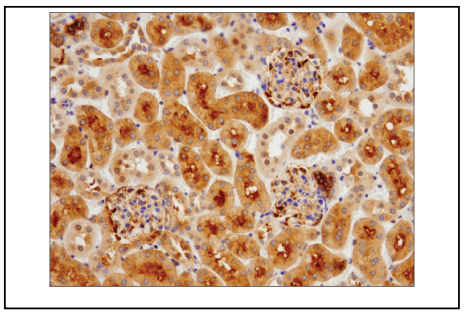
Revision 3

# #23214

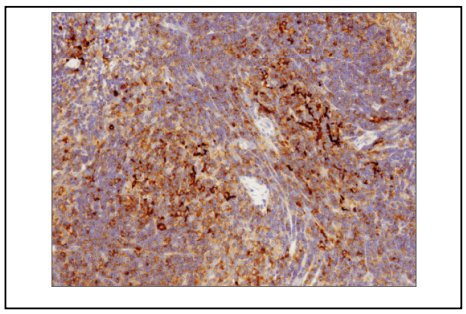
## SQSTM1/p62 (D6M5X) Rabbit mAb (Rodent Specific)



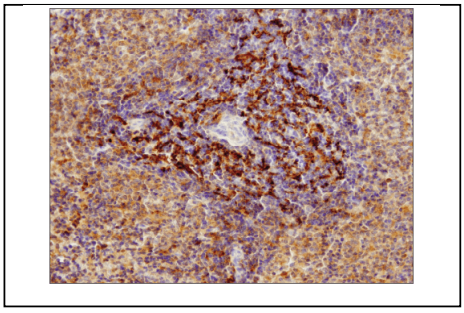
Immunohistochemical analysis of paraffin-embedded mouse forestomach using SQSTM1/p62 (D6M5X) Rabbit mAb (Rodent Specific).



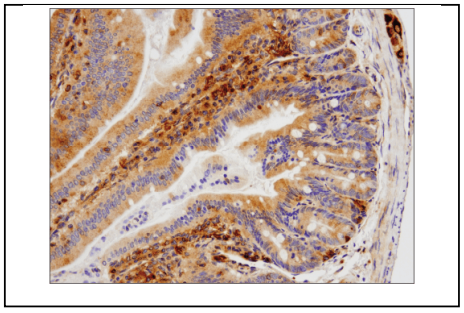
Immunohistochemical analysis of paraffin-embedded mouse kidney using SQSTM1/p62 (D6M5X) Rabbit mAb (Rodent Specific).



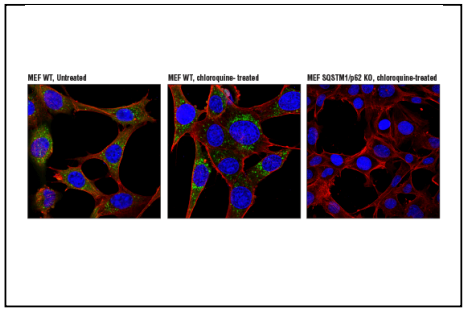
Immunohistochemical analysis of paraffin-embedded mouse spleen using SQSTM1/p62 (D6M5X) Rabbit mAb (Rodent Specific).



Immunohistochemical analysis of paraffin-embedded rat spleen using SQSTM1/p62 (D6M5X) Rabbit mAb (Rodent Specific).



Immunohistochemical analysis of paraffin-embedded mouse small intestine using SQSTM1/p62 (D6M5X) Rabbit mAb (Rodent Specific).




Confocal immunofluorescent analysis of wild-type MEFs, either untreated (left) or treated with Chloroquine #14774 (50 µM, 18 hours; center), and SQSTM1/p62 knock-out MEFs treated with chloroquine (right), using SQSTM1 (D6M5X) Rabbit mAb (green). Actin filaments were labeled with β-Actin (8H10D10) Mouse mAb #3700 (red). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye). MEF SQSTM1/p62 KO cells were kindly provided by Dr. Junying Yuan, Harvard Medical School, Boston MA.

# #23214

# SQSTM1/p62 (D6M5X) Rabbit mAb (Rodent Specific)

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Revision 5

Store at -20C

#3936

# Ubiquitin (P4D1) Mouse mAb

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| Applications: | Reactivity: | Sensitivity: | Source/Isotype: | UniProt ID: | Entrez-Gene Id: |
|---|---|---|---|---|---|
| WB, IHC-P | All | Endogenous | Mouse IgG1 | P62987, P0CG48, P0CG47, P62979 | 7311, 7316, 7314, 6233 |

## Product Usage Information

| Application | Dilution |
|---|---|
| Western Blotting | 1:1000 |
| Immunohistochemistry (Paraffin) | 1:100 - 1:400 |

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

## Specificity / Sensitivity

Ubiquitin (P4D1) Mouse mAb detects ubiquitin, polyubiquitin and ubiquitinated proteins. This antibody may cross-react with recombinant NEDD8.

**Species Reactivity:**
All Species Expected

## Source / Purification

Monoclonal antibody is produced by immunizing animals with 1-76 full length bovine ubiquitin.

## Background

Ubiquitin is a conserved polypeptide unit that plays an important role in the ubiquitin-proteasome pathway. Ubiquitin can be covalently linked to many cellular proteins by the ubiquitination process, which targets proteins for degradation by the 26S proteasome. Three components are involved in the target protein-ubiquitin conjugation process. Ubiquitin is first activated by forming a thiolester complex with the activation component E1; the activated ubiquitin is subsequently transferred to the ubiquitin-carrier protein E2, then from E2 to ubiquitin ligase E3 for final delivery to the epsilon-$NH_2$ of the target protein lysine residue (1-3). The ubiquitin-proteasome pathway has been implicated in a wide range of normal biological processes and in disease-related abnormalities. Several proteins such as IκB, p53, cdc25A, and Bcl-2 have been shown to be targets for the ubiquitin-proteasome process as part of regulation of cell cycle progression, differentiation, cell stress response, and apoptosis (4-7).

1. Ciechanover, A. (1998) *EMBO J* 17, 7151-60.
2. Hochstrasser, M. (2000) *Nat Cell Biol* 2, E153-7.
3. Hochstrasser, M. (2000) *Science* 289, 563-4.
4. Bernardi, R. et al. (2000) *Oncogene* 19, 2447-54.
5. Aberle, H. et al. (1997) *EMBO J* 16, 3797-804.
6. Salomoni, P. and Pandolfi, P.P. (2002) *Nat Cell Biol* 4, E152-3.
7. Jesenberger, V. and Jentsch, S. (2002) *Nat Rev Mol Cell Biol* 3, 112-21.

**Species reactivity is determined by testing in at least one approved application (e.g., western blot).**

**IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.**

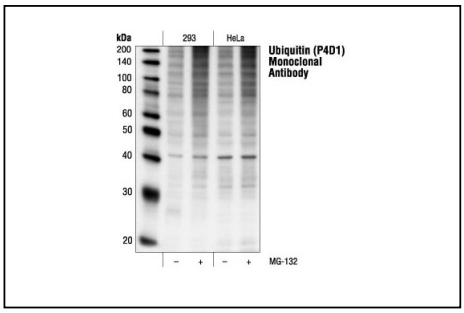
**APPLICATIONS KEY** **WB:** Western Blotting **IHC-P:** Immunohistochemistry (Paraffin)

**CROSS-REACTIVITY KEY** **H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **Rab:** rabbit **All:** all species expected

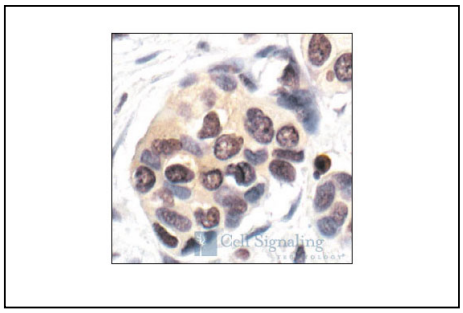
Revision 5

# #3936

## Ubiquitin (P4D1) Mouse mAb




Western blot analysis of 293 and HeLa cells, untreated or treated with the 26S proteasome inhibitor MG132 (50 µM, 90 minutes), using Ubiquitin (P4D1) Mouse mAb.



Immunohistochemical analysis of paraffin-embedded breast carcinoma showing nuclear and cytoplasmic ubiquitin localization, using Ubiquitin (P4D1) Mouse mAb.

# #3936

# Ubiquitin (P4D1) Mouse mAb

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# Product datasheet

# Anti-MARCO antibody ab108113

1 Abreviews 1 References 1 图像

## 概述

| | |
|---|---|
| **产品名称** | Anti-MARCO抗体 |
| **描述** | **兔多克隆抗体**to MARCO |
| **宿主** | Rabbit |
| **经测试应用** | **适用于:** WB |
| **种属反应性** | **与反应:** Human<br>**预测可用于:** Mouse, Rat, Horse, Chicken, Zebrafish |
| **免疫原** | Synthetic peptide corresponding to Human MARCO aa 370-419 (C terminal).<br>Sequence:<br>GPAGVKGEQGSPGLAGPKGAPGQAGQKGDQGVKGSSGEQGVK<br>GEKGERGE<br><br>Database link: NP_006761<br>Run BLAST with Run BLAST with |
| **阳性对照** | COLO205 cell lysate |
| **常规说明** | The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.<br>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, along with publications, customer reviews and Q&As |

## 性能

| | |
|---|---|
| **形式** | Liquid |
| **存放说明** | Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles. |
| **存储溶液** | pH: 7.2<br>Preservative: 0.09% Sodium azide<br>Constituents: 2% Sucrose, PBS |
| **纯度** | Immunogen affinity purified |
| **克隆** | **多克隆** |

| | |
|---|---|
| **同种型** | IgG |

## 应用

**The Abpromise guarantee** Abpromise™承诺保证使用ab108113于以下的经测试应用

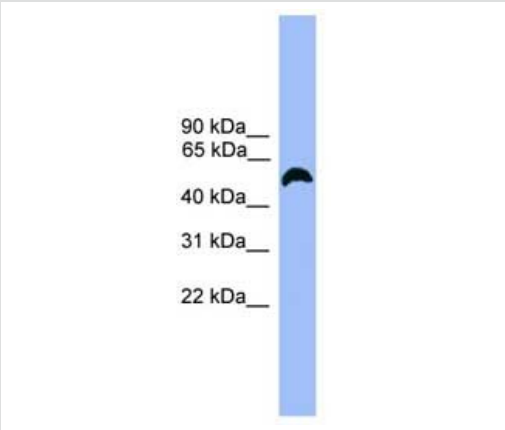
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

| 应用 | Ab评论 | 说明 |
|---|---|---|
| **WB** | | Use a concentration of 1 µg/ml. Predicted molecular weight: 53 kDa. Good results were obtained when blocked with 5% non-fat dry milk in 0.05% PBS-T. |

## 靶标

| | |
|---|---|
| **功能** | Pattern recognition receptor (PRR). Binds Gram-positive and Gram-negative bacteria. |
| **序列相似性** | Contains 1 collagen-like domain.<br>Contains 1 SRCR domain. |
| **细胞定位** | Membrane. |

## 图片




Western blot - Anti-MARCO antibody (ab108113)

Anti-MARCO antibody (ab108113) at 1 µg/ml + COLO205 cell lysate at 10 µg

**Predicted band size:** 53 kDa



## 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.cn/abpromise or contact our technical team.

## Terms and conditions

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

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# Product datasheet

# Anti-CD204 antibody [EPR7536] ab151707

重组 RabMAb

7 References 5 图像

## 概述

| | |
|---|---|
| **产品名称** | Anti-CD204抗体[EPR7536] |
| **描述** | 兔单克隆抗体[EPR7536] to CD204 |
| **宿主** | Rabbit |
| **经测试应用** | **适用于:** WB<br>**不适用于:** ICC,IHC-P or IP |
| **种属反应性** | **与反应:** Mouse, Rat, Human |
| **免疫原** | Synthetic peptide within Human CD204 aa 1-100 (N terminal). The exact sequence is proprietary.<br>Database link: P21757 |
| **阳性对照** | WB: Human placenta, THP1 and HeLa lysates |
| **常规说明** | This product is a recombinant monoclonal antibody, which offers several advantages including:<br>- High batch-to-batch consistency and reproducibility<br>- Improved sensitivity and specificity<br>- Long-term security of supply<br>- Animal-free production<br>For more information see here.<br>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.<br>**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.** |

## 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** | Preservative: 0.01% Sodium azide<br>Constituents: 40% Glycerol, 0.05% BSA, 59% PBS |

| | |
|---|---|
| **纯度** | Protein A purified |
| **克隆** | 单克隆 |
| **克隆编号** | EPR7536 |
| **同种型** | IgG |

## 应用

**The Abpromise guarantee** Abpromise™承诺保证使用ab151707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。

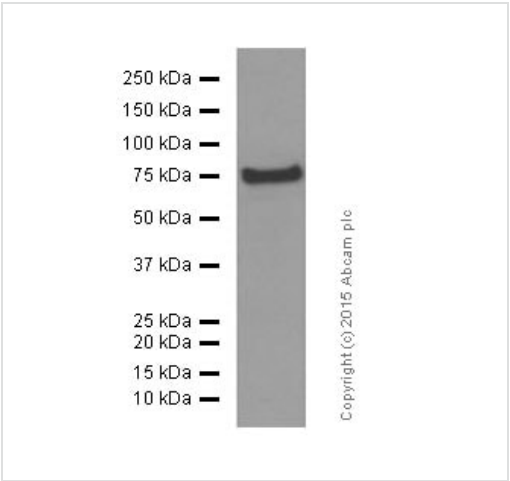
| 应用 | Ab评论 | 说明 |
|---|---|---|
| **WB** | | 1/1000 - 1/10000. Predicted molecular weight: 50 kDa. |

**应用说明** Is unsuitable for ICC,IHC-P or IP.

## 靶标

| | |
|---|---|
| **功能** | Membrane glycoproteins implicated in the pathologic deposition of cholesterol in arterial walls during atherogenesis. Two types of receptor subunits exist. These receptors mediate the endocytosis of a diverse group of macromolecules, including modified low density lipoproteins (LDL). Isoform III does not internalize actetylated LDL. |
| **组织特异性** | Isoform I, isoform II and isoform III are expressed in monocyte-derived macrophages. |
| **序列相似性** | Contains 1 collagen-like domain.<br>Contains 1 SRCR domain. |
| **细胞定位** | Membrane. |

## 图片




Western blot - Anti-CD204 antibody [EPR7536] (ab151707)

Anti-CD204 antibody [EPR7536] (ab151707) at 1/5000 dilution (purified) + rat placenta at 20 µg

**Secondary**

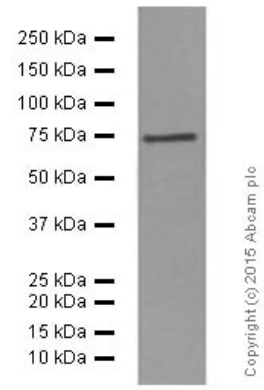
HRP goat anti-rabbit IgG (H+L) at 1/1000 dilution

**Predicted band size:** 50 kDa

**Observed band size:** 75 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST




Western blot - Anti-CD204 antibody [EPR7536] (ab151707)

Anti-CD204 antibody [EPR7536] (ab151707) at 1/1000 dilution (purified) + mouse placenta at 20 µg

**Secondary**

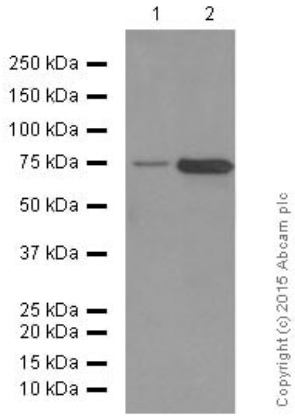
HRP goat anti-rabbit IgG (H+L) at 1/1000 dilution

**Predicted band size:** 50 kDa

**Observed band size:** 75 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST




Western blot - Anti-CD204 antibody [EPR7536] (ab151707)

**All lanes :** Anti-CD204 antibody [EPR7536] (ab151707) at 1/1000 dilution (purified)

**Lane 1 :** THP-1 cell lysate

**Lane 2 :** HeLa cell lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

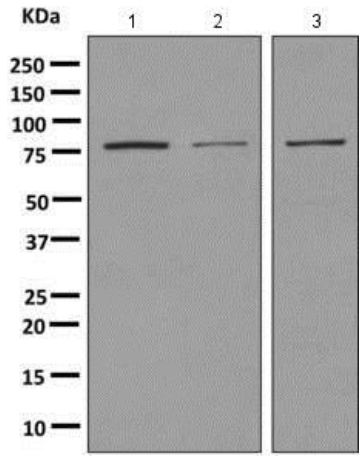
**All lanes :** HRP goat anti-rabbit IgG (H+L) at 1/1000 dilution

**Predicted band size:** 50 kDa

**Observed band size:** 75 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST




Western blot - Anti-CD204 antibody [EPR7536] (ab151707)

**All lanes :** Anti-CD204 antibody [EPR7536] (ab151707) at 1/1000 dilution

**Lane 1 :** Human placenta tissue lysate

**Lane 2 :** THP1 cell lysate

**Lane 3 :** HeLa cell lysate

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 50 kDa


Anti-CD204 antibody [EPR7536] (ab151707)

**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

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- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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## Product datasheet

# Anti-CD204 antibody ab123946

1 Abreviews 14 References 2 图像

### 概述

| | |
|---|---|
| **产品名称** | Anti-CD204抗体 |
| **描述** | 兔多克隆抗体to CD204 |
| **宿主** | Rabbit |
| **经测试应用** | **适用于:** WB, ICC/IF |
| **种属反应性** | **与反应:** Human |
| **免疫原** | Synthetic peptide corresponding to Human CD204 aa 300-400.<br>Database link: P21757 |
| **常规说明** | The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.<br>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, along with publications, customer reviews and Q&As |

### 性能

| | |
|---|---|
| **形式** | Liquid |
| **存放说明** | Shipped at 4°C. Store at 4°C (up to 6 months). Store at -20°C. |
| **存储溶液** | Preservative: 0.1% Sodium azide<br>Constituents: 69% PBS, 30% Glycerol |
| **纯度** | Protein A purified |
| **克隆** | 多克隆 |
| **同种型** | IgG |

### 应用

| | |
|---|---|
| **The Abpromise guarantee** | Abpromise™承诺保证使用ab123946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 |
|---|---|---|
| **WB** | | Use a concentration of 0.5 µg/ml. Detects a band of approximately 50 kDa (predicted molecular weight: 50 kDa). |
| **ICC/IF** | | 1/50 - 1/200. |

## 靶标

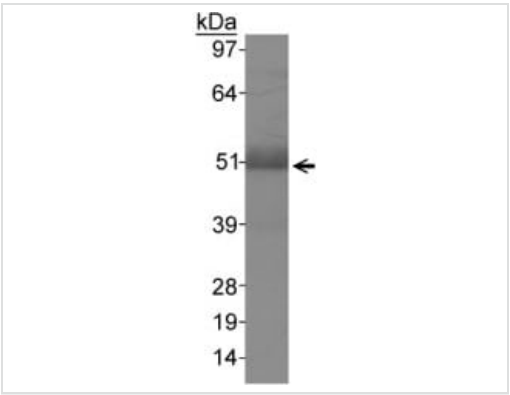
**功能**
Membrane glycoproteins implicated in the pathologic deposition of cholesterol in arterial walls during atherogenesis. Two types of receptor subunits exist. These receptors mediate the endocytosis of a diverse group of macromolecules, including modified low density lipoproteins (LDL). Isoform III does not internalize actetylated LDL.

**组织特异性**
Isoform I, isoform II and isoform III are expressed in monocyte-derived macrophages.

**序列相似性**
Contains 1 collagen-like domain.
Contains 1 SRCR domain.

**细胞定位**
Membrane.

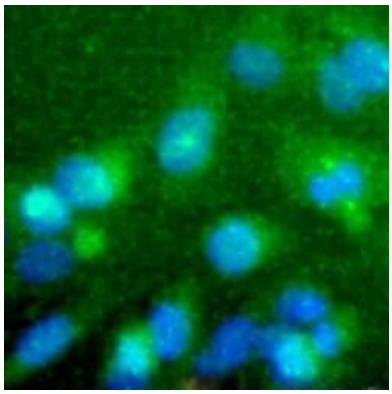
## 图片




Western blot - Anti-CD204 antibody (ab123946)

Anti-CD204 antibody (ab123946) at 0.5 µg/ml + Human liver lysate

**Predicted band size:** 50 kDa
**Observed band size:** 50 kDa



Immunocytochemistry/ Immunofluorescence - Anti-CD204 antibody (ab123946)

ab123946, at a 1/50 dilution, staining CD204 (green) in Hela cells by Immunofluorescence. Nuclei (blue) are counterstained using Hoechst 33258.



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## Terms and conditions

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

For Research Use Only

# Lamin A/C Polyclonal antibody

Catalog Number:10298-1-AP 132 Publications

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Antibodies | ELISA kits | Proteins
www.ptglab.com

## Basic Information

Catalog Number:
10298-1-AP

Size:
700 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG0408

GenBank Accession Number:
BC003162

GeneID (NCBI):
4000

Full Name:
lamin A/C

Calculated MW:
65 kDa

Observed MW:
65 kDa, 70 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:6000
IP 0.5-4.0 ug for IP and 1:500-1:2000 for WB
IF 1:50-1:500

## Applications

Tested Applications:
FC, IF, IP, WB,ELISA

Cited Applications:
IF, IP, WB

Species Specificity:
human, mouse, rat

Cited Species:
duck, human, mouse, rat

Positive Controls:

WB : NIH/3T3 cells, HEK-293 cells, C6 cells, A375 cells, mouse ovary tissue, HUVEC cells, SKOV-3 cells

IP : A375 cells,

IF : HepG2 cells, HeLa cells

## Background Information

Lamin A/C is also named as LMNA, or LMN1. The lamin family of proteins make up the matrix and are highly conserved in evolution. During mitosis, the lamina matrix is reversibly disassembled as the lamin proteins are phosphorylated. Lamin proteins are thought to be involved in nuclear stability, chromatin structure and gene expression. The lack of lamin A/C can be as a novel marker for undifferentiated embryonic stem cells and lamin A/C expression is as an early indicator of differentiation (PMID: 16179429). Mutations in this gene lead to several diseases: Emery-Dreifuss muscular dystrophy, familial partial lipodystrophy, limb girdle muscular dystrophy, dilated cardiomyopathy, Charcot-Marie-Tooth disease, and Hutchinson-Gilford progeria syndrome. This protein has 4 isoforms produced by alternative splicing with the molecular weight of 74 kDa, 65 kDa, 70 kDa and 64 kDa. This antibody can recognize 4 isoforms of Lamin A/C.

## Notable Publications

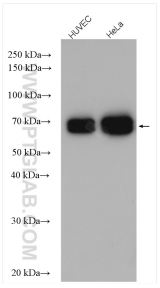
| Author | Pubmed ID | Journal | Application |
|---|---|---|---|
| Qingyang Zhang | 34551807 | Mol Neurodegener | WB |
| Fengbo Tan | 30218452 | J Cell Biochem | WB |
| Yingjie Liu | 34475402 | Nat Commun | WB |

## Storage

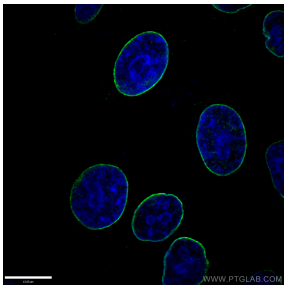
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

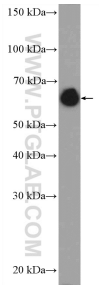
## Selected Validation Data



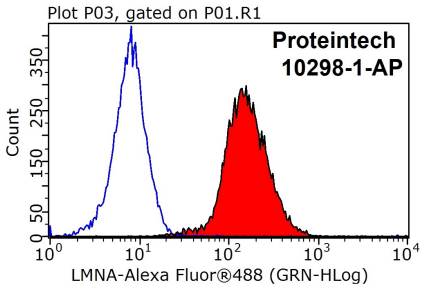

Various lysates were subjected to SDS PAGE followed by western blot with 10298-1-AP (Lamin A/C antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



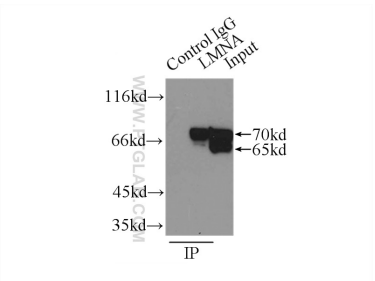

Immunofluorescent analysis of (-20℃ Ethanol) fixed HepG2 cells using 10298-1-AP (Lamin A/C antibody) at dilution of 1:200 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).




NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 10298-1-AP (Lamin A/C Antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.




1X10^6 HEK-293T cells were stained with 0.2ug Lamin A/C antibody (10298-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.




IP Result of anti-lamin-A (IP:10298-1-AP, 3ug; Detection:10298-1-AP 1:1000) with A375 cells lysate 800ug.

For Research Use Only

# HO-1/HMOX1 Polyclonal antibody

Catalog Number:10701-1-AP Featured Product 511 Publications

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Antibodies | ELISA kits | Proteins
www.ptglab.com

## Basic Information

Catalog Number:
10701-1-AP

Size:
600 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG1190

GenBank Accession Number:
BC001491

GeneID (NCBI):
3162

Full Name:
heme oxygenase (decycling) 1

Calculated MW:
33 kDa

Observed MW:
28-33 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:6000
IP 0.5-4.0 ug for IP and 1:500-1:2000 for WB
IHC 1:100-1:400
IF 1:200-1:800

## Applications

Tested Applications:
FC, IF, IHC, IP, WB, ELISA

Cited Applications:
CoIP, FC, IF, IHC, IP, WB

Species Specificity:
human, mouse, rat

Cited Species:
Bovine, chicken, human, monkey, mouse, pig, rat

***Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0***

Positive Controls:

WB : HT-1080 cells, HeLa cells, rat spleen tissue, HepG2 cells, mouse liver tissue, rat liver tissue, mouse kidney tissue, mouse spleen tissue

IP : HeLa cells,

IHC : human liver cancer tissue, human kidney tissue

IF : human liver cancer tissue,

## Background Information

Heme oxygenase (HMOX1) catalyzes the first and rate-limiting step in the degradation of heme to yield equimolar quantities of biliverdin Ixa, carbon monoxide (CO), and iron. It has 3 isoforms: HO-1 is highly inducible, whereas HO-2 and HO-3 are constitutively expressed (PMID:10194478). Heme oxygenase-1 (HO-1) is expressed in many tissues and vascular smooth muscle cells, and endothelial cells (PMID:15451051) and has been identified as an important endogenous protective factor induced in many cell types by various stimulants, such as hemolysis, infiammatory cytokines,oxidative stress, heat shock, heavy metals, and endotoxin (PMID: 11522663). And the full-length HO-1 is very unstable and susceptible to truncation that generates an inactive, soluble form (28 kDa) (James R. Reed, Pharmacology, 535-568).

## Notable Publications

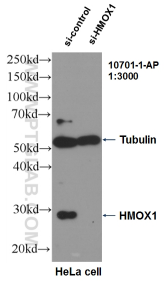
| Author | Pubmed ID | Journal | Application |
|---|---|---|---|
| Jiawen Zheng | 31569771 | Mar Drugs | WB |
| Yong Tao | 29048645 | Int J Oncol | WB |
| Wen Zhang | 31553975 | Kidney Blood Press Res | WB |

## Storage

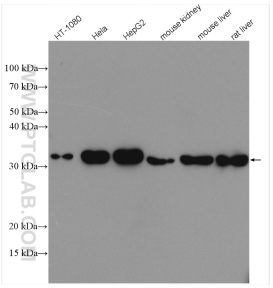
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

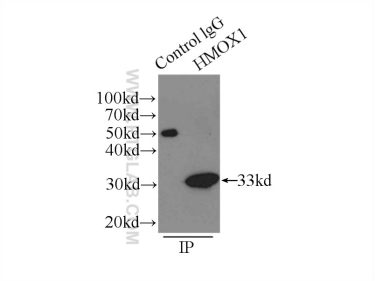
## Selected Validation Data



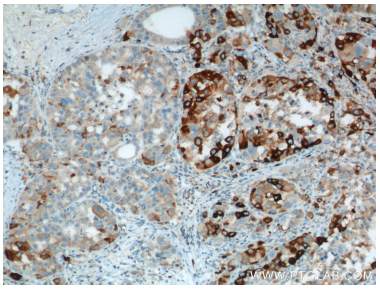

WB result of HMOX1 antibody (10701-1-AP, 1:3000) with si-Control and si-HMOX1 transfected HeLa cells.



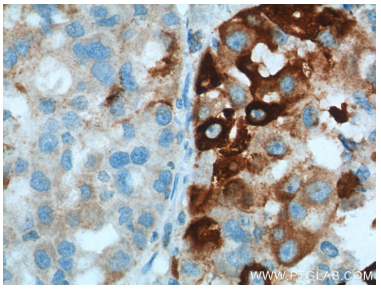

Various lysates were subjected to SDS PAGE followed by western blot with 10701-1-AP (HO-1/HMOX1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



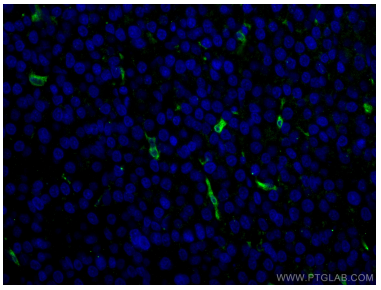

IP Result of anti-HMOX1 (IP:10701-1-AP, 3ug; Detection:10701-1-AP 1:1000) with HeLa cells lysate 3000ug.



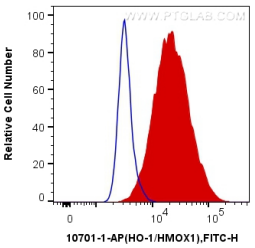
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 10701-1-AP (HMOX1 antibody at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 10701-1-AP (HMOX1 antibody at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using HO-1/HMOX1 antibody (10701-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).




1X10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human HO-1/HMOX1 (10701-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).

For Research Use Only

# GCLC Polyclonal antibody

Catalog Number:12601-1-AP Featured Product 74 Publications

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## Basic Information

Catalog Number:
12601-1-AP

Size:
600 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG3252

GenBank Accession Number:
BC022487

GeneID (NCBI):
2729

Full Name:
glutamate-cysteine ligase, catalytic subunit

Calculated MW:
637 aa, 73 kDa

Observed MW:
73 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:2000-1:10000
IP 0.5-4.0 ug for IP and 1:500-1:1000 for WB
IHC 1:50-1:500

## Applications

Tested Applications:
IHC, IP, WB, ELISA

Cited Applications:
IHC, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat

***Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0***

Positive Controls:

WB : Jurkat cells, HEK-293 cells, L02 cells, mouse kidney tissue, mouse lung tissue, Raji cells

IP : mouse kidney tissue,

IHC : human kidney tissue, human liver tissue

## Background Information

GCLC (Glutamate--cysteine ligase catalytic subunit) belongs to the glutamate--cysteine ligase type 3 family.It is also named as GLCL, GLCLC.It is the first rate-limiting enzyme in glutathione (GSH) biosynthesis.GCLC) gene may be associated with coronary endothelial vasomotor dysfunction and myocardial infarction (MI) (PMID:12598062). Defects in GCLC are the cause of hemolytic anemia (HAGGSD).

## Notable Publications

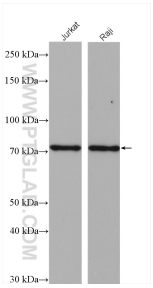
| Author | Pubmed ID | Journal | Application |
|---|---|---|---|
| Lu Wang | 34555641 | Int Immunopharmacol | WB |
| Ana Tomasovic | 27645114 | Matrix Biol | WB |
| Juan Chen | 34577027 | Molecules | WB |

## Storage

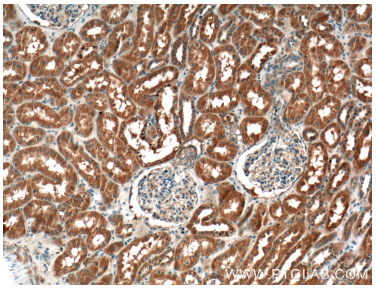
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

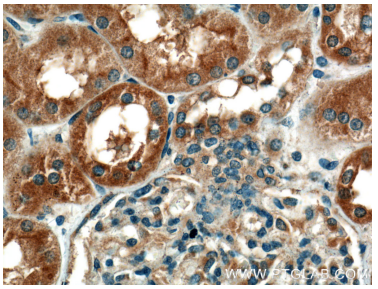
## Selected Validation Data



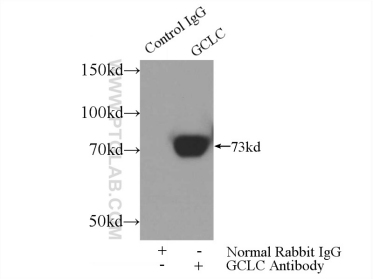

Various lysates were subjected to SDS PAGE followed by western blot with 12601-1-AP (GCLC antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 12601-1-AP (GCLC Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 12601-1-AP (GCLC Antibody) at dilution of 1:200 (under 40x lens).




IP Result of anti-GCLC (IP:12601-1-AP, 3ug; Detection:12601-1-AP 1:500) with mouse kidney tissue lysate 4000ug.

For Research Use Only

# GCLM Polyclonal antibody

Catalog Number:14241-1-AP Featured Product 85 Publications

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## Basic Information

Catalog Number:
14241-1-AP

Size:
450 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG5497

GenBank Accession Number:
BC041809

GeneID (NCBI):
2730

Full Name:
glutamate-cysteine ligase, modifier subunit

Calculated MW:
31 kDa

Observed MW:
31 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:2000-1:10000
IP 0.5-4.0 ug for IP and 1:1000-1:4000 for WB
IHC 1:100-1:400
IF 1:50-1:500

## Applications

Tested Applications:
FC, IF, IHC, IP, WB, ELISA

Cited Applications:
IF, IHC, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat

***Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0***

Positive Controls:

WB : A431 cells, MCF-7 cells, HeLa cells, L02 cells, mouse liver tissue, rat liver tissue

IP : A431 cells,

IHC : human liver cancer tissue, human skeletal muscle tissue

IF : HepG2 cells,

## Background Information

GCLM(Glutamate--cysteine ligase regulatory subunit) is also named as GLCLR and belongs to the aldo/keto reductase family. It catalyzes the first step of GSH synthesis and is involved in gamma-glutamyl cycle. GCLM is implicated in some forms of hemolytic anemia.

## Notable Publications

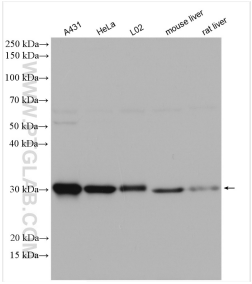
| Author | Pubmed ID | Journal | Application |
|---|---|---|---|
| Lin-Tao Xu | 34601084 | J Ethnopharmacol | WB |
| Jiawen Zheng | 31569771 | Mar Drugs | WB |
| Jie Deng | 34565300 | Bioengineered | WB |

## Storage

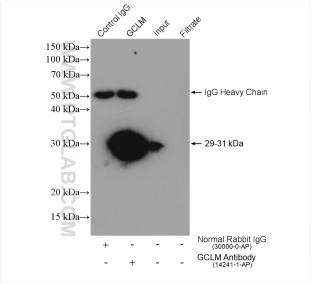
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

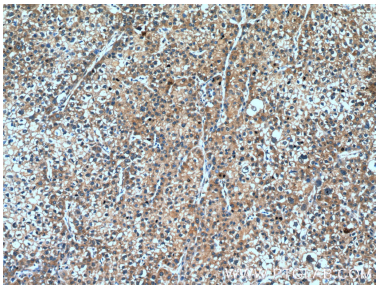
## Selected Validation Data



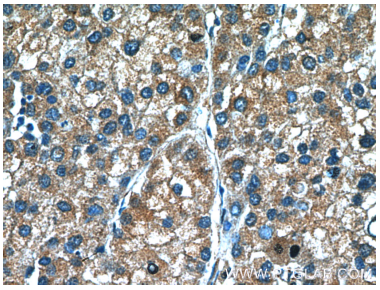

Various lysates were subjected to SDS PAGE followed by western blot with 14241-1-AP (GCLM antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



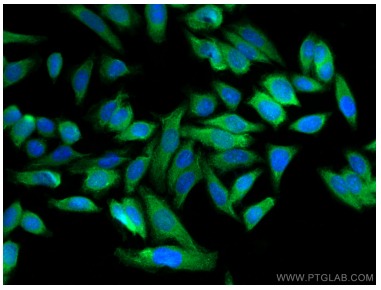

IP result of anti-GCLM(IP:14241-1-AP, 4ug; Detection:14241-1-AP 1:2000) with A431 cells lysate 1000 ug.



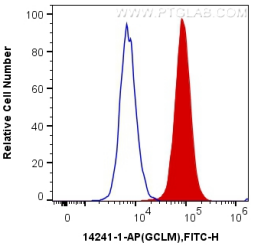
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 14241-1-AP (GCLM Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 14241-1-AP (GCLM Antibody) at dilution of 1:200 (under 40x lens).




Immunofluorescent analysis of (-20°C Methanol) fixed HepG2 cells using GCLM antibody (14241-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).




1X10^6 HepG2 cells were intracellularly stained with 0.4 ug Anti-Human GCLM (14241-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug x. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).

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# GSR Polyclonal antibody

Catalog Number:18257-1-AP Featured Product 10 Publications

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## Basic Information

Catalog Number:
18257-1-AP

Size:
650 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG13080

GenBank Accession Number:
BC069244

GeneID (NCBI):
2936

Full Name:
glutathione reductase

Calculated MW:
522 aa, 56 kDa

Observed MW:
52-55 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:4000
IP 0.5-4.0 ug for IP and 1:500-1:1000 for WB
IF 1:10-1:100

## Applications

Tested Applications:
IF, IP, WB,ELISA

Cited Applications:
WB

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat

Positive Controls:

WB : Jurkat cells, HeLa cells, mouse lung tissue, human placenta tissue, mouse testis tissue, rat testis tissue

IP : HeLa cells,

IF : MCF-7 cells,

## Background Information

GSR(Glutathione reductase) is also named as GLUR, GRD1 and belongs to the class-I pyridine nucleotide-disulfide oxidoreductase family.It was first found in a black American a variant red cell GSR characterized by greater electrophoretic mobility and enzyme activity per unit of hemoglobin than the normal.This protein maintains high levels of reduced glutathione in the cytosol.It has 5 isoforms produced by alternative splicing and alternative initiation.It can also exsit as a homodimer with the molecular weight of 110KDa(PMID:8631352).This antibody is specific to GSR.

## Notable Publications

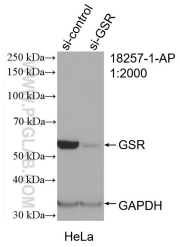
| Author | Pubmed ID | Journal | Application |
|---|---|---|---|
| Zhi-Guo Zheng | 27193186 | Sci Rep | WB |
| Zhengxuan Wang | 32163604 | J Food Biochem | WB |
| Minnan Zhao | 26950675 | Cell Cycle | WB |

## Storage

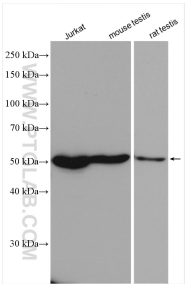
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

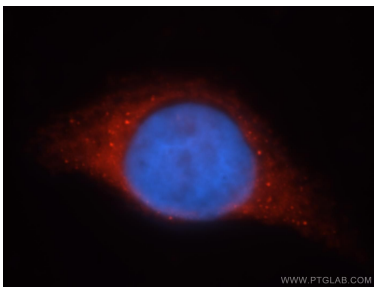
## Selected Validation Data



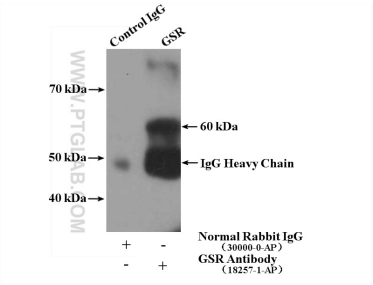

WB result of GSR antibody (18257-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-GSR transfected HeLa cells.



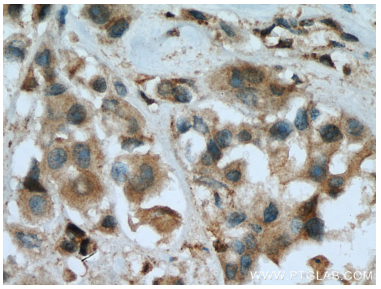

Various lysates were subjected to SDS PAGE followed by western blot with 18257-1-AP (GSR antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.




Immunofluorescent analysis of MCF-7 cells, using GSR antibody 18257-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).Blue pseudocolor = DAPI (fluorescent DNA dye).




IP Result of anti-GSR (IP:18257-1-AP, 4ug; Detection:18257-1-AP 1:500) with HeLa cells lysate 2600ug.




Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 18257-1-AP (GSR antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

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# NQO1 Monoclonal antibody

Catalog Number:67240-1-Ig 45 Publications

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## Basic Information

Catalog Number:
67240-1-Ig

Size:
1000 μg/ml

Source:
Mouse

Isotype:
IgG2a

Immunogen Catalog Number:
AG28933

GenBank Accession Number:
BC007659

GeneID (NCBI):
1728

Full Name:
NAD(P)H dehydrogenase, quinone 1

Calculated MW:
274 aa, 31 kDa

Observed MW:
29-31 kDa

Purification Method:
Protein A purification

CloneNo.:
1E5G7

Recommended Dilutions:
WB 1:5000-1:50000
IHC 1:2500-1:10000

## Applications

Tested Applications:
FC, IHC, WB, ELISA

Cited Applications:
IHC, WB

Species Specificity:
Human, Rat, pig

Cited Species:
human, mouse, pig, rat

***Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0***

Positive Controls:

WB : HepG2 cells, HSC-T6 cells, L02 cells, K-562 cells

IHC : human colon tissue,

## Background Information

NQO1, also named as DIA4, NMOR1, DTD and QR1, belongs to the NAD(P)H dehydrogenase (quinone) family. This enzyme apparently serves as a quinone reductase in connection with conjugation reactions of hydroquinons involved in detoxification pathways as well as in biosynthetic processes such as the vitamin K-dependent gamma-carboxylation of glutamate residues in prothrombin synthesis. It is known to be involved in benzene metabolism. In human studies of ozone exposure, polymorphisms in oxidative stress genes (NQO1, GSTM1, GSTP1) modify respiratory symptoms, lung function, biomarkers and risk of asthma. (PMID:18511640; 18848868 )

## Notable Publications

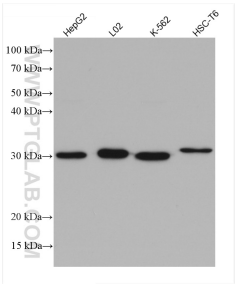
| Author | Pubmed ID | Journal | Application |
|---|---|---|---|
| Jinliang Liu | 34630847 | Oxid Med Cell Longev | WB |
| Lei Zhao | 34582963 | Food Chem Toxicol | WB |
| Juan Chen | 34577027 | Molecules | WB |

## Storage

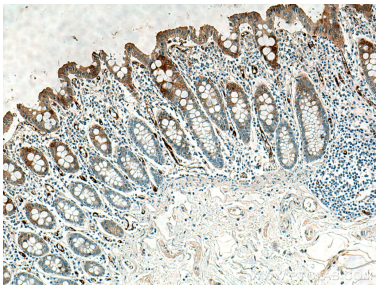
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

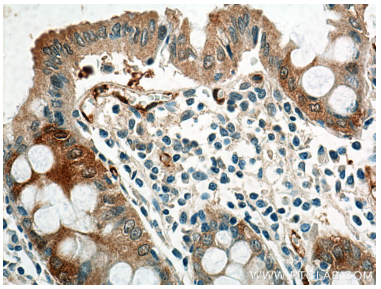
## Selected Validation Data



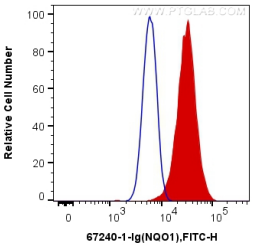

Various lysates were subjected to SDS PAGE followed by western blot with 67240-1-Ig (NQO1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 67240-1-Ig (NQO1 antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 67240-1-Ig (NQO1 antibody) at dilution of 1:5000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).




1X10^6 MCF-7 cells were intracellularly stained with 0.4 ug Anti-Human NQO1 (67240-1-Ig, Clone:1E5G7) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG2a Isotype Control (66360-2-Ig, Clone: K11A1B2A2) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).

Technical Data Sheet

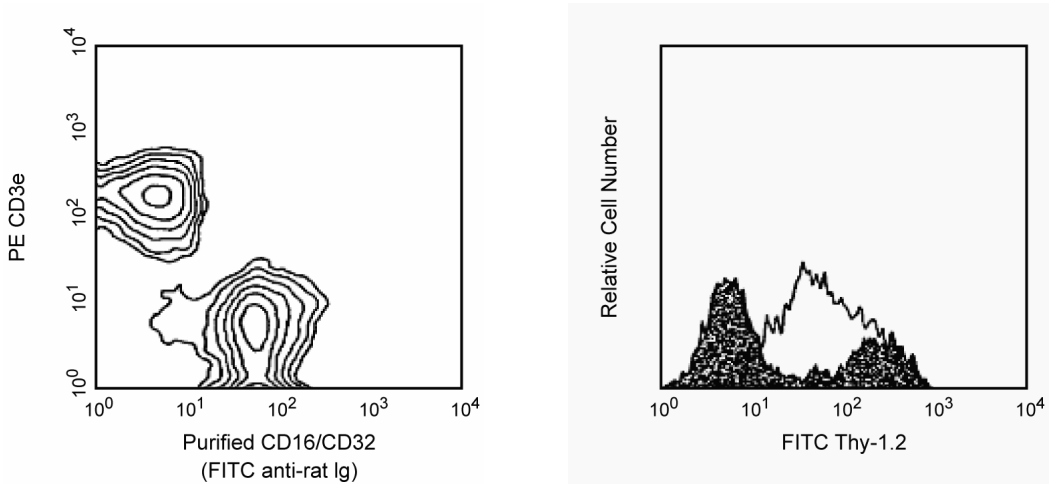
# Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)

## Product Information

| | |
|---|---|
| **Material Number:** | **553141** |
| **Alternate Name:** | FcγRIII/FcγRII; Fcgr3/Fcgr2 |
| **Size:** | 0.1 mg |
| **Concentration:** | 0.5 mg/ml |
| **Clone:** | 2.4G2 |
| **Immunogen:** | Mouse BALB/c Macrophage J774 |
| **Isotype:** | Rat (SD) IgG2b, κ |
| **Reactivity:** | QC Testing: Mouse |
| **RRID:** | AB_394656 |
| **Storage Buffer:** | Aqueous buffered solution containing ≤0.09% sodium azide. |

## Description

The 2.4G2 antibody specifically recognizes a common nonpolymorphic epitope on the extracellular domains of the mouse FcγIII (CD16) and FcγII (CD32) Receptors. It has also been reported to bind the FcγI receptor (CD64) via its Fc domain. 2.4G2 mAb blocks non-antigen-specific binding of immunoglobulins to the FcγIII and FcγII, and possibly FcγI, Receptors *in vitro* and *in vivo*. CD16 and/or CD32 are expressed on natural killer cells, monocytes, macrophages, dendritic cells (at low levels), Kupffer cells, granulocytes, mast cells, B lymphocytes, immature thymocytes, and some activated mature T lymphocytes.




***Two color analysis of the expression of CD16/CD32 on mouse spleen cells and demonstration of FCγR-mediated non-specific staining.*** *Left: BALB/c splenocytes were simultaneously stained with PE-conjugated anti-mouse CD3e mAb 145-2C11 (Cat. No. 553063/553064) and purified 2.4G2 mAb. The staining by 2.4G2 antibody was detected with FITC-conjugated mouse anti-rat Ig, κ chain mAb MRK-1 (Cat. No. 553872). Right: BALB/c splenocytes were stained with FITC-conjugated rat anti-mouse CD90.2 (Thy-1.2) mAb 53-2.1 (Cat. No. 553003/553004) in the presence of purified 2.4G2 mAb (filled histogram) and without 2.4G2 mAb (open histogram). Flow cytometry was performed on a BD FACScan™ flow cytometry system.*

## Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at 4°C.

## Application Notes

**Application**

| | |
|---|---|
| Flow cytometry | Routinely Tested |
| Blocking | Routinely Tested |
| Immunohistochemistry-frozen | Tested During Development |
| Immunoprecipitation | Reported |

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**Recommended Assay Procedure:**

To specifically stain cells bearing FcγII and FcγIII receptors for flow cytometric analysis: Incubate cell suspension with this antibody (≤ 1 µg/million cells) followed by an appropriate fluorochrome-conjugated second-step reagent.

To reduce Fc receptor-mediated binding by antibodies of interest or Fc receptor-mediated binding by PE-CY5 tandem dye conjugatesto FcγII and FcγIII receptor-bearing mouse cells for flow cytometric analysis:

1. Preincubate cell suspension with Mouse BD Fc Block™ purified anti-mouse CD16/CD32 mAb 2.4G2 (eg, ≤ 1 µg/million cells in 100 µl) at 4˚C for 5 minutes.
2. Add antibody of interest directly to preincubated cells in the presence of Mouse BD Fc Block™ (ie, Mouse BD Fc Block™ need not be washed off before staining cells).
3. If anti-Ig second-step is necessary, a reagent must be chosen which will not bind to Mouse BD Fc Block™ (eg, rat $IgG_{2b}$, κ).

For additional information on using Mouse BD Fc Block™, refer to the "Reducing non-specific staining with Fc Block" section of our Flow Cytometry protocols at our website: https://www.bdbiosciences.com/en-us/resources/protocols/flow-cytometry

## Product Notices

1. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to www.bdbiosciences.com/us/s/resources for technical protocols.
4. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.
5. Please refer to http://regdocs.bd.com to access safety data sheets (SDS).

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# PerCP/Cyanine5.5 anti-mouse CD3 Antibody

| | |
|---|---|
| **Catalog# / Size** | 100217 / 25 µg<br>100218 / 100 µg |
| **Clone** | 17A2 |
| **Regulatory Status** | RUO |
| **Other Names** | T cell antigen receptor complex, T3 |
| **Isotype** | Rat IgG2b, κ |
| **Description** | CD3, also known as T3, is a member of the Ig superfamily and primarily expressed on T cells, NK-T cells, and at different levels on thymocytes during T cell differentiation. CD3 is composed of CD3ε, δ, γ and ζ chains. It forms a TCR complex by associating with TCR α/β or γ/δ chains. CD3 plays a critical role in TCR signal transduction, T cell activation, and antigen recognition by binding the peptide/MHC antigen complex |

## Product Details

| | |
|---|---|
| **Verified Reactivity** | Mouse |
| **Antibody Type** | Monoclonal |
| **Host Species** | Rat |
| **Immunogen** | γδTCR-positive T-T hybridoma D1 |
| **Formulation** | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide. |
| **Preparation** | The antibody was purified by affinity chromatography, and conjugated with PerCP/Cyanine5.5 under optimal conditions. |
| **Concentration** | 0.2 mg/ml |
| **Storage & Handling** | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze.** |
| **Application** | FC - *Quality tested* |
| **Recommended Usage** | Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is =1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.<br><br>* PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm. |
| **Application Notes** | Additional reported application (for relevant formats) include: spatial biology (IBEX)[1,2]. |
| **Additional Product Notes** | BioLegend is in the process of converting the name PerCP/Cy5.5 to PerCP/Cyanine5.5. The dye molecule remains the same, so you should expect the same quality and performance from our PerCP/Cyanine5.5 products. Contact Technical Service if you have any questions. |

**Application References**

**(PubMed link indicates BioLegend citation)**


1. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci U S A.* 117:33455-65. (SB) PubMed
2. Radtke AJ, *et al.* 2022. *Nat Protoc.* 17:378-401. (SB) PubMed


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**RRID**

AB_1595597 (BioLegend Cat. No. 100217)
AB_1595492 (BioLegend Cat. No. 100218)

## Antigen Details

| | |
|---|---|
| **Structure** | Ig superfamily, CD3/TCR, 20 kD |
| **Distribution** | Thymocytes (differentiation dependent), mature T cells, NK-T cells |
| **Function** | Antigen recognition, TCR signal transduction, T cell activation |
| **Ligand/Receptor** | Peptide antigen/MHC-complex |
| **Antigen References** | 1. Barclay A, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press.<br>2. Davis MM. 1990. *Annu. Rev. Biochem.* 59:475.<br>3. Weiss A, *et al.* 1994. *Cell* 76:263. |
| **Gene ID** | 12502 |

## Related Protocols

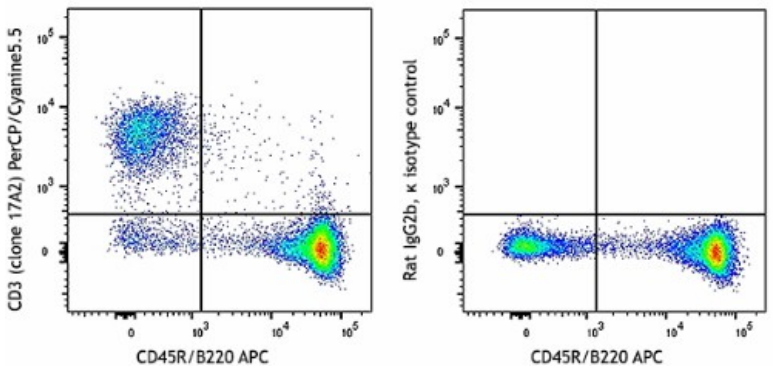
Cell Surface Flow Cytometry Staining Protocol

## Other Formats

FITC anti-mouse CD3, PE anti-mouse CD3, Purified anti-mouse CD3, Alexa Fluor® 647 anti-mouse CD3, Alexa Fluor® 488 anti-mouse CD3, Pacific Blue™ anti-mouse CD3, Alexa Fluor® 700 anti-mouse CD3, PerCP/Cyanine5.5 anti-mouse CD3, PE/Cyanine7

anti-mouse CD3, APC/Cyanine7 anti-mouse CD3, Brilliant Violet 421™ anti-mouse CD3, Brilliant Violet 570™ anti-mouse CD3, Brilliant Violet 650™ anti-mouse CD3, Brilliant Violet 785™ anti-mouse CD3, Brilliant Violet 510™ anti-mouse CD3, APC anti-mouse CD3, Ultra-LEAF™ Purified anti-mouse CD3, Brilliant Violet 605™ anti-mouse CD3, Alexa Fluor® 594 anti-mouse CD3, Brilliant Violet 711™ anti-mouse CD3, Biotin anti-mouse CD3, PE/Dazzle™ 594 anti-mouse CD3, APC/Fire™ 750 anti-mouse CD3, Brilliant Violet 750™ anti-mouse CD3, TotalSeq™-A0182 anti-mouse CD3, TotalSeq™-B0182 anti-mouse CD3, Spark Blue™ 550 anti-mouse CD3, Spark NIR™ 685 anti-mouse CD3, TotalSeq™-C0182 anti-mouse CD3, APC/Fire™ 810 anti-mouse CD3, PE/Fire™ 640 anti-mouse CD3, Spark YG™ 570 anti-mouse CD3, PE/Fire™ 700 anti-mouse CD3, PE/Cyanine5 anti-mouse CD3, Spark Blue™ 574 anti-mouse CD3 Antibody, Spark Violet™ 423 anti-mouse CD3, PE/Fire™ 810 anti-mouse CD3, Spark Red™ 718 anti-mouse CD3

## Product Data




C57BL/6 splenocytes were stained with CD45R/B220 APC and CD3 (clone 17A2) PerCP/Cyanine5.5 (left) or Rat IgG2b, ? PerCP/Cyanine5.5 isotype control (right).



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# FITC anti-mouse/human CD11b Antibody

| | |
|---|---|
| **Catalog# / Size** | 101205 / 50 µg<br>101206 / 500 µg |
| **Clone** | M1/70 |
| **Regulatory Status** | RUO |
| **Other Names** | αM integrin, Mac-1, Mo1, CR3, Ly-40, C3biR, ITGAM |
| **Isotype** | Rat IgG2b, κ |
| **Description** | CD11b is a 170 kD glycoprotein also known as αM integrin, Mac-1 α subunit, Mol, CR3, and Ly-40. CD11b is a member of the integrin family, primarily expressed on granulocytes, monocytes/macrophages, dendritic cells, NK cells, and subsets of T and B cells. CD11b non-covalently associates with CD18 (β2 integrin) to form Mac-1. Mac-1 plays an important role in cell-cell interaction by binding its ligands ICAM-1 (CD54), ICAM-2 (CD102), ICAM-4 (CD242), iC3b, and fibrinogen. |

## Product Details

| | |
|---|---|
| **Verified Reactivity** | Mouse, Human, Cynomolgus, Rhesus |
| **Reported Reactivity** | Chimpanzee, Baboon, Rabbit |
| **Antibody Type** | Monoclonal |
| **Host Species** | Rat |
| **Immunogen** | C57BL/10 splenocytes |
| **Formulation** | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide. |
| **Preparation** | The antibody was purified by affinity chromatography, and conjugated with FITC under optimal conditions. |
| **Concentration** | 0.5 mg/ml |
| **Storage & Handling** | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze.** |
| **Application** | FC - Quality tested |
| **Recommended Usage** | Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 µg per $10^6$ cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application. |
| **Excitation Laser** | Blue Laser (488 nm) |
| **Application Notes** | Clone M1/70 has been verified for immunocytochemistry (ICC) and frozen immunohistochemistry (IHC-F).<br><br>Additional reported applications (for relevant formats of this clone) include: immunoprecipitation[1,4], *in vitro* blocking[3,9,12], depletion[2,8], immunofluorescence microscopy[6,7,10], immunohistochemistry of acetone-fixed frozen sections[5,11-13], and spatial biology (IBEX)[35,36]. For *in vivo* studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) (Cat. No. 101248). |

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**(PubMed link indicates BioLegend citation)**


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**RRID**

AB_312788 (BioLegend Cat. No. 101205)
AB_312789 (BioLegend Cat. No. 101206)

## Antigen Details

**Structure**

Integrin family, associates with integrin $\beta_2$ (CD18), 170 kD

**Distribution**

Granulocytes, monocytes/macrophages, dendritic cells, NK cells, subsets of T and B cells

| | |
|---|---|
| **Function** | Adhesion, chemotaxis |
| **Ligand/Receptor** | ICAM-1 (CD54), ICAM-2 (CD102), ICAM-4 (CD242), iC3b, fibrinogen |
| **Cell Type** | B cells, Dendritic cells, Granulocytes, Macrophages, Monocytes, Neutrophils, NK cells, T cells, Tregs |
| **Biology Area** | Cell Adhesion, Cell Biology, Costimulatory Molecules, Immunology, Innate Immunity, Neuroscience, Neuroscience Cell Markers |
| **Molecular Family** | Adhesion Molecules, CD Molecules |
| **Antigen References** | 1. Barclay A, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press.<br>2. Springer TA. 1994. *Cell* 76:301.<br>3. Coxon A, *et al.* 1996. *Immunity* 5:653. |
| **Gene ID** | 16409<br>3684 |

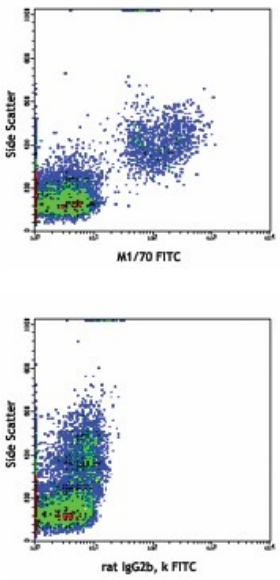
## Related Protocols

Cell Surface Flow Cytometry Staining Protocol

## Other Formats

APC anti-mouse/human CD11b, Biotin anti-mouse/human CD11b, FITC anti-mouse/human CD11b, PE anti-mouse/human CD11b, PE/Cyanine5 anti-mouse/human CD11b, Purified anti-mouse/human CD11b, PE/Cyanine7 anti-mouse/human CD11b, Alexa Fluor® 488 anti-mouse/human CD11b, Alexa Fluor® 647 anti-mouse/human CD11b, Alexa Fluor® 700 anti-mouse/human CD11b, Pacific Blue™ anti-mouse/human CD11b, APC/Cyanine7 anti-mouse/human CD11b, PerCP/Cyanine5.5 anti-mouse/human CD11b, PerCP anti-mouse/human CD11b, Brilliant Violet 421™ anti-mouse/human CD11b, Brilliant Violet 570™ anti-mouse/human CD11b, Brilliant Violet 605™ anti-mouse/human CD11b, Brilliant Violet 650™ anti-mouse/human CD11b, Brilliant Violet 711™ anti-mouse/human CD11b, Brilliant Violet 785™ anti-mouse/human CD11b, Brilliant Violet 510™ anti-mouse/human CD11b, Ultra-LEAF™ Purified anti-mouse/human CD11b, Purified anti-mouse/human CD11b (Maxpar® Ready), Alexa Fluor® 594 anti-mouse/human CD11b, PE/Dazzle™ 594 anti-mouse/human CD11b, APC/Fire™ 750 anti-mouse/human CD11b, TotalSeq™-A0014 anti-mouse/human CD11b, Brilliant Violet 750™ anti-mouse/human CD11b, TotalSeq™-B0014 anti-mouse/human CD11b, TotalSeq™-C0014 anti-mouse/human CD11b, Spark NIR™ 685 anti-mouse/human CD11b, PE/Fire™ 640 anti-mouse/human CD11b, Spark YG™ 593 anti-mouse/human CD11b, Spark YG™ 570 anti-mouse/human CD11b, PE/Fire™ 810 anti-mouse/human CD11b, APC/Fire™ 810 anti-mouse/human CD11b Antibody, Spark Blue™ 550 anti-mouse/human CD11b, Spark UV™ 387 anti-mouse/human CD11b

## Product Data




C57BL/6 mouse bone marrow cells were stained with CD11b (clone M1/70) FITC (top) or rat IgG2b, κ FITC isotype control (bottom) (gated on total viable cells).

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# Brilliant Violet 421™ anti-mouse Ly-6G/Ly-6C (Gr-1) Antibody

| | |
|---|---|
| **Catalog# / Size** | 108433 / 125 µL<br>108445 / 50 µg<br>108434 / 500 µL |
| **Clone** | RB6-8C5 |
| **Regulatory Status** | RUO |
| **Other Names** | Gr-1 |
| **Isotype** | Rat IgG2b, κ |
| **Description** | Gr-1 is a 21-25 kD protein also known as Ly-6G/Ly-6C. This myeloid differentiation antigen is a glycosylphosphatidylinositol (GPI)-linked protein expressed on granulocytes and macrophages. In bone marrow, the expression levels of Gr-1 directly correlate with granulocyte differentiation and maturation; Gr-1 is also transiently expressed on bone marrow cells in the monocyte lineage. Immature Myeloid Gr-1+ cells play a role in the development of antitumor immunity. |

## Product Details

| | |
|---|---|
| **Verified Reactivity** | Mouse |
| **Antibody Type** | Monoclonal |
| **Host Species** | Rat |
| **Immunogen** | Raised against granulocytes of mouse origin |
| **Formulation** | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA). |
| **Preparation** | The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. |
| **Storage & Handling** | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze.** |
| **Application** | FC - Quality tested |
| **Recommended Usage** | Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining using the µl size, the suggested use of this reagent is 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood. For flow cytometric staining using the µg size, the suggested use of this reagent is ≤ 0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.<br><br>Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.<br><br>Learn more about Brilliant Violet™.<br><br>This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents. |
| **Excitation Laser** | Violet Laser (405 nm) |
| **Application Notes** | Clone RB6-8C5 binds with high affinity to mouse Ly-6G molecules and to a lower extent to Ly-6C[19]. Clone RB6-8C5 impairs the binding of anti-mouse Ly-6G clone 1A8[19]. However, clone RB6-8C5 is able to stain in the presence of anti-mouse Ly-6C clone HK1.4[20].<br><br>The RB6-8C5 antibody has been used to identify peripheral blood neutrophils and deplete granulocytes *in vivo*. Additional reported applications (for relevant formats of this clone) include: *in vitro* complement-mediated cytotoxicity[2], *in vivo* depletion[3-5,9], immunoprecipitation[1], |

immunohistochemical staining[6] (including paraffin-embedded sections[9,16,33-35], acetone-fixed frozen sections[11] and zinc-fixed sections[15]), and Western blotting[7]. RB6-8C5 is not suitable for depletion of hepatic myeloid derived suppressor cells (MDSCs)[20].

**Special Note:** For *in vivo* studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 108436).

**Application References**

**(PubMed link indicates BioLegend citation)**


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**Product Citations**


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2. Yamauchi T *et al.* 2018. Cancer cell. 33(3):386-400 . PubMed
3. Chen X *et al.* 2017. Cell stem cell. 21(6):747-760 . PubMed
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**RRID**

AB_10900232 (BioLegend Cat. No. 108433)
AB_2562903 (BioLegend Cat. No. 108445)
AB_2562219 (BioLegend Cat. No. 108434)

## Antigen Details

**Structure** 21-25 kD

**Distribution** Granulocytes, monocytes

**Cell Type** Granulocytes, Monocytes, Neutrophils

**Biology Area** Immunology, Innate Immunity

**Antigen References**


1. Fleming TJ, *et al.* 1993. *J. Immunol.* 151:2399.
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**Gene ID** 17067

546644

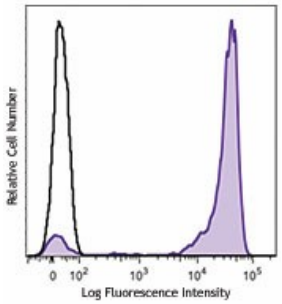
## Related Protocols

Cell Surface Flow Cytometry Staining Protocol

## Other Formats

APC anti-mouse Ly-6G/Ly-6C (Gr-1), Biotin anti-mouse Ly-6G/Ly-6C (Gr-1), FITC anti-mouse Ly-6G/Ly-6C (Gr-1), PE anti-mouse Ly-6G/Ly-6C (Gr-1), PE/Cyanine5 anti-mouse Ly-6G/Ly-6C (Gr-1), Purified anti-mouse Ly-6G/Ly-6C (Gr-1), PE/Cyanine7 anti-mouse Ly-6G/Ly-6C (Gr-1), Alexa Fluor® 488 anti-mouse Ly-6G/Ly-6C (Gr-1), Alexa Fluor® 647 anti-mouse Ly-6G/Ly-6C (Gr-1), Alexa Fluor® 700 anti-mouse Ly-6G/Ly-6C (Gr-1), Brilliant Violet 711™ anti-mouse Ly-6G/Ly-6C (Gr-1), APC/Cyanine7 anti-mouse Ly-6G/Ly-6C (Gr-1), Pacific Blue™ anti-mouse Ly-6G/Ly-6C (Gr-1), PerCP/Cyanine5.5 anti-mouse Ly-6G/Ly-6C (Gr-1), PerCP anti-mouse Ly-6G/Ly-6C (Gr-1), Brilliant Violet 421™ anti-mouse Ly-6G/Ly-6C (Gr-1), Brilliant Violet 570™ anti-mouse Ly-6G/Ly-6C (Gr-1), Ultra-LEAF™ Purified anti-mouse Ly-6G/Ly-6C (Gr-1), Brilliant Violet 510™ anti-mouse Ly-6G/Ly-6C (Gr-1), Brilliant Violet 605™ anti-mouse Ly-6G/Ly-6C (Gr-1), Brilliant Violet 650™ anti-mouse Ly-6G/Ly-6C (Gr-1), Alexa Fluor® 594 anti-mouse Ly-6G/Ly-6C (Gr-1), Purified anti-mouse Ly-6G/Ly-6C (Gr-1) (Maxpar® Ready), PE/Dazzle™ 594 anti-mouse Ly-6G/Ly-6C (Gr-1), APC/Fire™ 750 anti-mouse Ly-6G/Ly-6C (Gr-1), TotalSeq™-A0116 anti-mouse Ly-6G/Ly-6C (Gr-1), TotalSeq™-C0116 anti-mouse Ly-6G/Ly-6C (Gr-1), TotalSeq™-B0116 anti-mouse Ly-6G/Ly-6C (Gr-1), Spark Blue™ 550 anti-mouse Ly-6G/Ly-6C (Gr-1), APC/Fire™ 810 anti-mouse Ly-6G/Ly-6C (Gr-1), Spark Violet™ 423 anti-mouse Ly-6G/Ly-6C (GR-1) Antibody, Spark UV™ 387 anti-mouse Ly-6G/Ly-6C (GR-1)

## Product Data




C57BL/6 mouse bone marrow cells were stained with Ly-6G/Ly-6C (clone RB6-8C5) Brilliant Violet 421™ (filled histogram) or rat IgG2b, κ Brilliant Violet 421™ isotype control (open histogram). Data shown was gated on myeloid cell population.



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# PE/Cyanine7 anti-mouse CD19 Antibody

| | |
|---|---|
| **Catalog# / Size** | 115519 / 25 µg<br>115520 / 100 µg |
| **Clone** | 6D5 |
| **Regulatory Status** | RUO |
| **Other Names** | B4 |
| **Isotype** | Rat IgG2a, κ |
| **Description** | CD19 is a 95 kD glycoprotein also known as B4. It is a member of the Ig superfamily, expressed on all pro-B to mature B cells (during development) and follicular dendritic cells. Plasma cells do not express CD19. CD19, in association with CD21 and CD81, forms a molecular complex integral to B cell activation. |

## Product Details

| | |
|---|---|
| **Verified Reactivity** | Mouse |
| **Antibody Type** | Monoclonal |
| **Host Species** | Rat |
| **Immunogen** | Mouse CD19-expressing K562 human erythroleukemia cells |
| **Formulation** | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide. |
| **Preparation** | The antibody was purified by affinity chromatography, and conjugated with PE/Cyanine7 under optimal conditions. |
| **Concentration** | 0.2 mg/ml |
| **Storage & Handling** | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze.** |
| **Application** | FC - Quality tested |
| **Recommended Usage** | Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 µg per $10^6$ cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application. |
| **Excitation Laser** | Blue Laser (488 nm)<br>Green Laser (532 nm)/Yellow-Green Laser (561 nm) |
| **Application Notes** | Additional reported applications (for the relevant formats) include: immunofluorescence[7]. |
| **Additional Product Notes** | BioLegend is in the process of converting the name PE/Cy7 to PE/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our PE/Cyanine7 products. Please contact Technical Service if you have any questions. |

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**(PubMed link indicates BioLegend citation)**


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**RRID**

AB_313654 (BioLegend Cat. No. 115519)
AB_313655 (BioLegend Cat. No. 115520)

## Antigen Details

| | |
|---|---|
| **Structure** | Ig superfamily, associates with CD21 and CD81, 95 kD |
| **Distribution** | Pro-B cells to mature B cells (during development), follicular dendritic cells |
| **Function** | Modulates B cell activation and differentiation |
| **Ligand/Receptor** | CD21, CD81, Leu-13 |
| **Cell Type** | B cells, Dendritic cells |
| **Biology Area** | Costimulatory Molecules, Immunology |
| **Molecular Family** | CD Molecules |

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| | |
|---|---|
| **Gene ID** | 12478 |

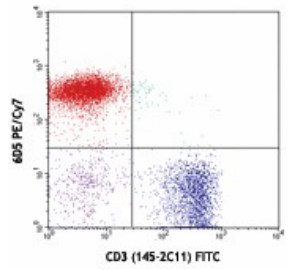
## Related Protocols

Cell Surface Flow Cytometry Staining Protocol

## Other Formats

APC anti-mouse CD19, Biotin anti-mouse CD19, FITC anti-mouse CD19, PE anti-mouse CD19, PE/Cyanine5 anti-mouse CD19, Purified anti-mouse CD19, PE/Cyanine7 anti-mouse CD19, Alexa Fluor® 488 anti-mouse CD19, Alexa Fluor® 647 anti-mouse CD19, Pacific Blue™ anti-mouse CD19, Alexa Fluor® 700 anti-mouse CD19, APC/Cyanine7 anti-mouse CD19, PerCP anti-mouse CD19, PerCP/Cyanine5.5 anti-mouse CD19, Alexa Fluor® 594 anti-mouse CD19, Brilliant Violet 421™ anti-mouse CD19, Brilliant Violet 570™ anti-mouse CD19, Brilliant Violet 605™ anti-mouse CD19, Brilliant Violet 650™ anti-mouse CD19, Brilliant Violet 785™ anti-mouse CD19, Brilliant Violet 510™ anti-mouse CD19, Purified anti-mouse CD19 (Maxpar® Ready), PE/Dazzle™ 594 anti-mouse CD19, Brilliant Violet 711™ anti-mouse CD19, APC/Fire™ 750 anti-mouse CD19, TotalSeq™-A0093 anti-mouse CD19, Brilliant Violet 750™ anti-mouse CD19, TotalSeq™-B0093 anti-mouse CD19, Spark Blue™ 550 anti-mouse CD19, Spark NIR™ 685 anti-mouse CD19, TotalSeq™-C0093 anti-mouse CD19, Ultra-LEAF™ Purified anti-mouse CD19, PE/Fire™ 640 anti-mouse CD19 Antibody, Spark YG™ 581 anti-mouse CD19, APC/Fire™ 810 anti-mouse CD19, Spark YG™ 570 anti-mouse CD19, Spark Blue™ 574 anti-mouse CD19 Antibody

## Product Data




C57BL/6 splenocytes were stained with CD19 (clone 6D5) PE/Cyanine7 and CD3 FITC.



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# APC anti-mouse F4/80 Antibody

| | |
|---|---|
| **Catalog# / Size** | 123115 / 25 µg<br>123116 / 100 µg |
| **Clone** | BM8 |
| **Regulatory Status** | RUO |
| **Other Names** | EMR1, Ly71 |
| **Isotype** | Rat IgG2a, κ |
| **Description** | F4/80 is a 160 kD glycoprotein. It is characterized as a member of the epidermal growth factor (EGF)-transmembrane 7 (TM7) family. F4/80, also known as EMR1 or Ly71, has been widely used as a murine macrophage marker, which is expressed on the majority of tissue macrophages including peritoneal macrophages, macrophages in lung, gut, thymus and red pulp of spleen (but not on the macrophages located in T cell areas of the spleen, lymph node and Peyer's patch), Kuffer cells, Langerhans cells, and bone marrow stromal cells. F4/80 has also been shown on a subset of dendritic cells. The biological ligand of F4/80 has not been identified, but it has been reported that F4/80 is required for induction of $CD8^+$ T cells-mediated peripheral tolerance. |

## Product Details

| | |
|---|---|
| **Verified Reactivity** | Mouse |
| **Antibody Type** | Monoclonal |
| **Host Species** | Rat |
| **Immunogen** | Murine macrophages |
| **Formulation** | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide. |
| **Preparation** | The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions. |
| **Concentration** | 0.2 mg/ml |
| **Storage & Handling** | The F4/80 antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze.** |
| **Application** | FC - Quality tested |
| **Recommended Usage** | Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 µg per $10^6$ cells in 100 µl. It is recommended that the reagent be titrated for optimal performance for each application. |
| **Excitation Laser** | Red Laser (633 nm) |
| **Application Notes** | Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen sections[1,2] and formalin-fixed paraffin-embedded sections[6,7], Western blotting, and spatial biology (IBEX)[12,13]. |

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**(PubMed link indicates BioLegend citation)**


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**RRID**

AB_893493 (BioLegend Cat. No. 123115)
AB_893481 (BioLegend Cat. No. 123116)

## Antigen Details

| | |
|---|---|
| **Structure** | EGF-TM7 family member, 160 kD glycoprotein |
| **Distribution** | Majority of tissue macrophages including peritoneal macrophages, macrophages in lung, gut, thymus and red pulp of spleen, Kuffer cells, Langerhans cells, bone marrow stromal cells, and a subset of dendritic cells |
| **Function** | Induction of immunological tolerance |
| **Cell Type** | Dendritic cells, Langerhans cells, Macrophages, Tregs |
| **Biology Area** | Cell Biology, Immunology, Innate Immunity, Neuroinflammation, Neuroscience |

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**Gene ID** 13733

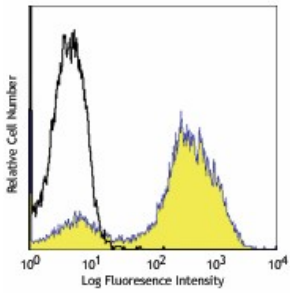
## Related Protocols

Cell Surface Flow Cytometry Staining Protocol

## Other Formats

Brilliant Violet 605™ anti-mouse F4/80, Purified anti-mouse F4/80, Biotin anti-mouse F4/80, FITC anti-mouse F4/80, PE anti-mouse F4/80, PE/Cyanine5 anti-mouse F4/80, PE/Cyanine7 anti-mouse F4/80, APC anti-mouse F4/80, APC/Cyanine7 anti-mouse F4/80, Alexa Fluor® 488 anti-mouse F4/80, Alexa Fluor® 647 anti-mouse F4/80, Pacific Blue™ anti-mouse F4/80, PerCP anti-mouse F4/80, PerCP/Cyanine5.5 anti-mouse F4/80, Alexa Fluor® 700 anti-mouse F4/80, Brilliant Violet 421™ anti-mouse F4/80, Brilliant Violet 510™ anti-mouse F4/80, Alexa Fluor® 594 anti-mouse F4/80, Brilliant Violet 785™ anti-mouse F4/80, Purified anti-mouse F4/80 (Maxpar® Ready), PE/Dazzle™ 594 anti-mouse F4/80, Brilliant Violet 650™ anti-mouse F4/80, Brilliant Violet 711™ anti-mouse F4/80, APC/Fire™ 750 anti-mouse F4/80, TotalSeq™-A0114 anti-mouse F4/80, TotalSeq™-B0114 anti-mouse F4/80, TotalSeq™-C0114 anti-mouse F4/80, Spark YG™ 570 anti-mouse F4/80, KIRAVIA Blue 520™ anti-mouse F4/80, Ultra-LEAF™ Purified anti-mouse F4/80, APC/Fire™ 810 anti-mouse F4/80, Spark NIR™ 685 anti-mouse F4/80

## Product Data




Thioglycolate-elicited BALB/c mouse peritoneal macrophages stained with BM8 APC



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# PE anti-mouse CD11c Antibody

| | |
|---|---|
| **Catalog# / Size** | 117307 / 50 µg<br>117308 / 200 µg |
| **Clone** | N418 |
| **Regulatory Status** | RUO |
| **Other Names** | αX integrin, integrin αX chain, CR4, p150, ITGAX |
| **Isotype** | Armenian Hamster IgG |
| **Description** | CD11c is a 150 kD glycoprotein also known as $\alpha_X$ integrin, CR4, and p150. CD11c forms a $\alpha_X\beta_2$ heterodimer with $\beta_2$ integrin (CD18). It is primarily expressed on dendritic cells, NK cells, a subset of intestinal intraepithelial lymphocytes (IEL), and some activated T cells. The $\alpha_X\beta_2$ integrin plays an important role in cell-cell contact by binding its ligands: iC3b, fibrinogen, and CD54. |

## Product Details

| | |
|---|---|
| **Verified Reactivity** | Mouse |
| **Antibody Type** | Monoclonal |
| **Host Species** | Armenian Hamster |
| **Immunogen** | Mouse spleen dendritic cells |
| **Formulation** | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide. |
| **Preparation** | The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions. |
| **Concentration** | 0.2 mg/ml |
| **Storage & Handling** | The CD11c antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze.** |
| **Application** | FC - Quality tested |
| **Recommended Usage** | Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 µg per $10^6$ cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for other applications. |
| **Excitation Laser** | Blue Laser (488 nm)<br>Green Laser (532 nm)/Yellow-Green Laser (561 nm) |
| **Application Notes** | Additional reported applications (for the relevant formats) include: immunoprecipitation[3], immunohistochemical staining of acetone-fixed frozen sections[3], immunofluorescence microscopy[5, 9] (Alexa Fluor® 488 conjugated N418 was used for IHC in frozen sections[10]), and spatial biology (IBEX)[22,23]. |

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**(PubMed link indicates BioLegend citation)**


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**RRID**

AB_313776 (BioLegend Cat. No. 117307)
AB_313777 (BioLegend Cat. No. 117308)

## Antigen Details

| | |
|---|---|
| **Structure** | Integrin α-chain, associates with integrin $\beta_2$ (CD18), 150 kD |
| **Distribution** | Dendritic cells, NK cells, intestinal intraepithelial lymphocytes (IEL), some activated T cells |
| **Function** | Cellular adhesion |
| **Ligand/Receptor** | iC3b, fibrinogen |
| **Cell Type** | Dendritic cells, Epithelial cells, NK cells, T cells, Tregs |
| **Biology Area** | Cell Adhesion, Cell Biology, Costimulatory Molecules, Immunology, Innate Immunity, Neuroscience, Neuroscience Cell Markers |
| **Molecular Family** | Adhesion Molecules, CD Molecules |
| **Antigen References** | 1. Barclay A, *et al.* 1997. The Leukocyte Antigen Facts Book Academic Press.<br>2. Springer TA. 1994. *Cell* 76:301.<br>3. Lopez-Rodriguez C, *et al.* 1996. *J. Immunol.* 156:3780. |
| **Gene ID** | 16411 |

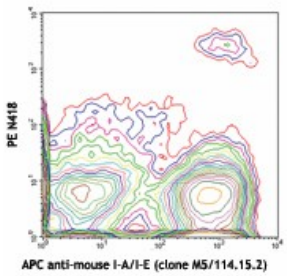
## Related Protocols

Cell Surface Flow Cytometry Staining Protocol

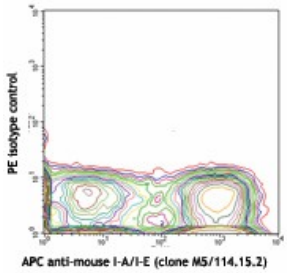
## Other Formats

APC anti-mouse CD11c, Biotin anti-mouse CD11c, FITC anti-mouse CD11c, PE anti-mouse CD11c, Purified anti-mouse CD11c, Alexa Fluor® 488 anti-mouse CD11c, Alexa Fluor® 647 anti-mouse CD11c, PE/Cyanine5 anti-mouse CD11c, PE/Cyanine7 anti-mouse CD11c, Brilliant Violet 605™ anti-mouse CD11c, Alexa Fluor® 700 anti-mouse CD11c, Pacific Blue™ anti-mouse CD11c, APC/Cyanine7 anti-mouse CD11c, PerCP/Cyanine5.5 anti-mouse CD11c, PerCP anti-mouse CD11c, Brilliant Violet 421™ anti-mouse CD11c, Brilliant Violet 570™ anti-mouse CD11c, Brilliant Violet 785™ anti-mouse CD11c, Brilliant Violet 510™ anti-mouse CD11c, Brilliant Violet 650™ anti-mouse CD11c, Purified anti-mouse CD11c (Maxpar® Ready), Alexa Fluor® 594 anti-mouse CD11c, PE/Dazzle™ 594 anti-mouse CD11c, Brilliant Violet 711™ anti-mouse CD11c, APC/Fire™ 750 anti-mouse CD11c, TotalSeq™-A0106 anti-mouse CD11c, Brilliant Violet 750™ anti-mouse CD11c, TotalSeq™-B0106 anti-mouse CD11c, TotalSeq™-C0106 anti-mouse CD11c, KIRAVIA Blue 520™ anti-mouse CD11c, Spark Blue™ 550 anti-mouse CD11c, Spark NIR™ 685 anti-mouse CD11c, Spark UV™ 387 anti-mouse CD11c, Spark Red™ 718 anti-mouse CD11c

## Product Data




C57BL/6 mouse splenocytes stained with APC anti-mouse I-A/I-E (clone M5/114.15.2) and PE N418 (top) or PE Armenian hamster IgG isotype control (bottom)

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# Human KEAP1 / INRF2 Protein (His & GST Tag)

**Catalog Number:** **11981-H20B**

## General Information

**Gene Name Synonym:**

INRF2; KEAP-1; KLHL19

**Protein Construction:**

A DNA sequence encoding the human KEAP1 (NP_036421.2) (Gln2-Cys624) was expressed with the N-terminal polyhistidine-tagged GST tag at the N-terminus.

**Source:** Human

**Expression Host:** Baculovirus-Insect Cells

## QC Testing

**Purity:** > 85 % as determined by SDS-PAGE

**Endotoxin:**

< 1.0 EU per μg of the protein as determined by the LAL method

**Stability:**

Samples are stable for up to twelve months from date of receipt at -70 ℃

**Predicted N terminal:** Met

**Molecular Mass:**

The recombinant human KEAP1/GST chimera consists of 860 amino acids and has a calculated molecular mass of 97.37 kDa. The recombinant protein migrates as an approximately 109 kDa band in SDS-PAGE under reducing conditions.

**Formulation:**

Lyophilized from sterile 20mM Tris, 500mM NaCl, 10% glycerol, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

**Storage:**

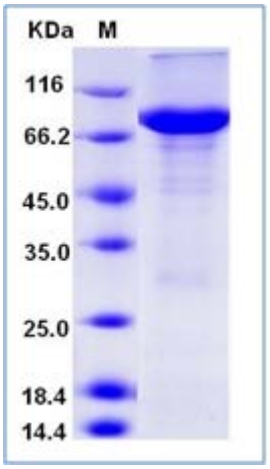
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

**Reconstitution:**

Detailed reconstitution instructions are sent along with the products.

**SDS-PAGE:**




## Protein Description

Kelch-like ECH-associated protein 1, also known as cytosolic inhibitor of Nrf2, Kelch-like protein 19, KEAP1 and INRF2, is a cytoplasm and nucleus protein which contains one BACK (BTB/Kelch associated) domain, one BTB (POZ) domain and six Kelch repeats. KEAP1 / INRF2 is broadly expressed, with highest levels in skeletal muscle. KEAP1 / INRF2 is a key regulator of the NRF2 transcription factor, which transactivates the antioxidant response element (ARE) and upregulates numerous proteins involved in antioxidant defense. Under basal conditions, KEAP1 / INRF2 targets NRF2 for ubiquitination and proteolytic degradation and as such is responsible for the rapid turnover of NRF2. KEAP1 / INRF2 retains NFE2L2 / NRF2 in the cytosol. KEAP1 / INRF2 functions as substrate adapter protein for the E3 ubiquitin ligase complex formed by CUL3 and RBX1. It targets NFE2L2 / NRF2 for ubiquitination and degradation by the proteasome, thus resulting in the suppression of its transcriptional activity and the repression of antioxidant response element-mediated detoxifying enzyme gene expression. KEAP1 / INRF2 may also retain BPTF in the cytosol. It targets PGAM5 for ubiquitination and degradation by the proteasome.

**References**

1.Strachan GD. et al., 2004, Biochemistry. 43: 12113-22. 2.Zhang DD. et al., 2004, Mol Cell Biol. 24: 10941-53. 3.Zhang DD. et al., 2003, Mol Cell Biol. 23: 8137-51.