abcam

Product datasheet

# Alexa Fluor® 488 Anti-IKK alpha antibody [Y463] ab200412

敲除验证 重组 RabMAb

5 图像

## 概述

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| **产品名称** | Alexa Fluor® 488荧光Anti-IKK alpha抗体[Y463] |
| **描述** | Alexa Fluor® 488荧光兔单克隆抗体[Y463] to IKK alpha |
| **宿主** | Rabbit |
| **偶联物** | Alexa Fluor® 488. Ex: 495nm, Em: 519nm |
| **经测试应用** | **适用于:** ICC/IF, Flow Cyt (Intra) |
| **种属反应性** | **与反应:** Human<br>**预测可用于:** Mouse, Rat |
| **免疫原** | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. |
| **阳性对照** | ICC/IF: HeLa and wildtype HAP1 cells. Flow Cyt (intra): HeLa cells.HAP1-WT cells. |
| **常规说明** | 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>Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or **outlicensing@thermofisher.com**. |

## 性能

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| **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. |

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| | Avoid freeze / thaw cycle. Store In the Dark. |
| **存储溶液** | pH: 7.40<br>Preservative: 0.02% Sodium azide<br>Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA |
| **纯度** | Protein A purified |
| **克隆** | 单克隆 |
| **克隆编号** | Y463 |
| **同种型** | IgG |

## 应用

**The Abpromise guarantee** **Abpromise™承诺保证使用ab200412于以下的经测试应用**

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

| 应用 | Ab评论 | 说明 |
|---|---|---|
| **ICC/IF** | | 1/100 - 1/400. |
| **Flow Cyt (Intra)** | | 1/50. |

## 靶标

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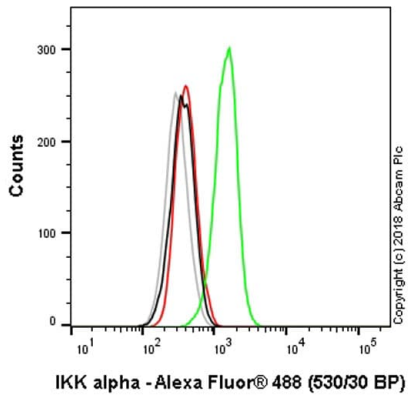
| **功能** | Acts as part of the IKK complex in the conventional pathway of NF-kappa-B activation and phosphorylates inhibitors of NF-kappa-B thus leading to the dissociation of the inhibitor/NF-kappa-B complex and ultimately the degradation of the inhibitor. As part of the non-canonical pathway of NF-kappa-B activation, the MAP3K14-activated CHUK/IKKA homodimer phosphorylates NFKB2/p100 associated with RelB, inducing its proteolytic processing to NFKB2/p52 and the formation of NF-kappa-B RelB-p52 complexes. Also phosphorylates NCOA3. Phosphorylates 'Ser-10' of histone H3 at NF-kappa-B-regulated promoters during inflammatory responses triggered by cytokines. |
| **组织特异性** | Widely expressed. |
| **疾病相关** | Defects in CHUK are the cause of cocoon syndrome (COCOS) [MIM:613630]; also known as fetal encasement syndrome. COCOS is a lethal syndrome characterized by multiple fetal malformations including defective face and seemingly absent limbs, which are bound to the trunk and encased under the skin. |
| **序列相似性** | Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. I-kappa-B kinase subfamily.<br>Contains 1 protein kinase domain. |
| **翻译后修饰** | Phosphorylated by MAP3K14/NIK, AKT and to a lesser extent by MEKK1, and dephosphorylated by PP2A. Autophosphorylated.<br>Acetylation of Thr-179 by Yersinia yopJ prevents phosphorylation and activation, thus blocking the I-kappa-B signaling pathway. |
| **细胞定位** | Cytoplasm. Nucleus. Shuttles between the cytoplasm and the nucleus. |

## 图片



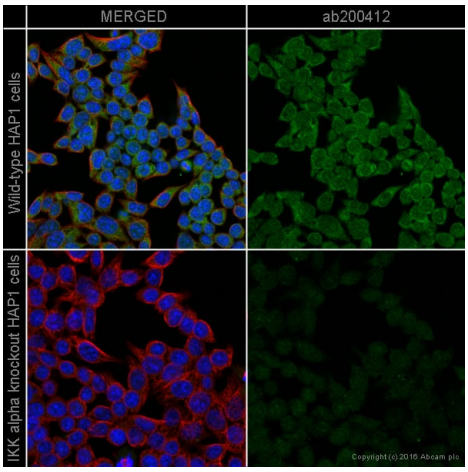

Flow Cytometry (Intracellular) - Alexa Fluor® 488 Anti-IKK alpha antibody [Y463] (ab200412)

Overlay histogram showing HAP1 wildtype (green line) and HAP1-CHUK knockout cells (red line) stained with ab200412. The cells were fixed with 4% formaldehyde (10 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab200412, 0.1µg/ml dilution) for 30 min at 22°C.

A rabbit monoclonal IgG isotype control antibody (**ab199091**) was used at the same concentration and conditions as the primary antibody (HAP1 wildtype - black line, HAP1-CHUK knockout - grey line). Unlabelled sample was also used as a control (this line is not shown for the purpose of simplicity).

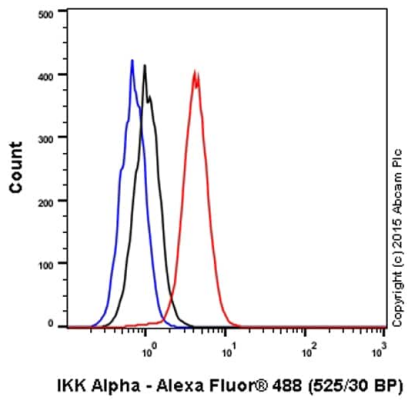
Acquisition of >5,000 events were collected using a 50 mW Blue laser (488nm) and 530/30 bandpass filter.

This antibody can also be used in HAP1 cells fixed with 80% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 15 min under the same conditions.



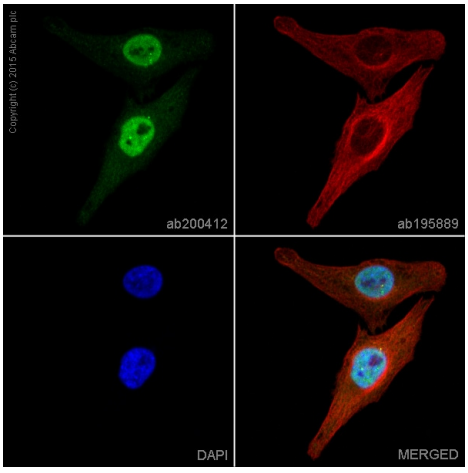

Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-IKK alpha antibody [Y463] (ab200412)

ab200412 staining IKKα in wild-type HAP1 cells (top panel) and IKKα knockout HAP1 cells (bottom panel). The cells were fixed with 100% methanol (5min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab200412 at 1/400 dilution and **ab7291** at 1µg/ml dilution overnight at +4°C, followed by a further incubation at room temperature for 1h with a goat secondary antibody to Mouse IgG (Alexa Fluor® 594) (**ab150120**) at 2 µg/ml (shown in pseudo colour red). Nuclear DNA was labelled in blue with DAPI.




Flow Cytometry (Intracellular) - Alexa Fluor® 488 Anti-IKK alpha antibody [Y463] (ab200412)

Overlay histogram showing HeLa cells stained with ab200412 (red line). The cells were fixed with 4% formaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab200412, 1/50 dilution) for 30 min at 22°C. Isotype control antibody (black line) was rabbit monoclonal IgG [EPR25A] Alexa Fluor® 488 (**ab199091**) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in HeLa cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.




Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-IKK alpha antibody [Y463] (ab200412)

ab200412 staining IKK alpha in HeLa cells. The cells were fixed with 4% formaldehyde (10min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab200412 at 1/100 dilution (shown in green) and **ab195889**, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at 2µg/ml (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).


Alexa Fluor® 488 Anti-IKK alpha antibody [Y463] (ab200412)

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

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