

Anti-AK2 antibody [EPR11387(B)] ab157206

敲除验证
重组
RabMAb

[1 References](#)
[6 图像](#)

概述

产品名称	Anti-AK2抗体[EPR11387(B)]
描述	兔单克隆抗体[EPR11387(B)] to AK2
宿主	Rabbit
经测试应用	适用于: Flow Cyt (Intra), WB, IHC-P 不适用于: ICC/IF or IP
种属反应性	与反应: Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: HEK-293, HepG2 and HL-60 cell lysates; Fetal kidney, heart and liver lysates; Recombinant human AK2 protein. IHC-P: Human heart and liver tissues. Flow Cyt (intra): HeLa cells.
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at -20°C.
存储溶液	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
纯度	Tissue culture supernatant

克隆 单克隆
 克隆编号 EPR11387(B)
 同种型 IgG

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab157206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
Flow Cyt (Intra)		1/10 - 1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/10000. Predicted molecular weight: 26 kDa.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

应用说明 Is unsuitable for ICC/IF or IP.

靶标

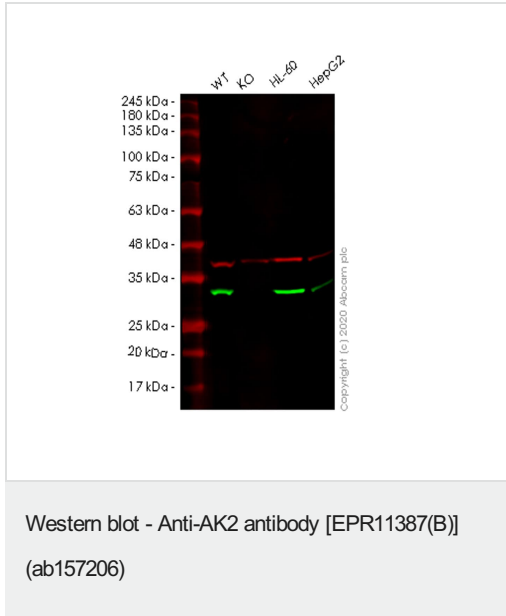
功能 Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP. This small ubiquitous enzyme involved in energy metabolism and nucleotide synthesis that is essential for maintenance and cell growth. Plays a key role in hematopoiesis.

组织特异性 Present in most tissues. Present at high level in heart, liver and kidney, and at low level in brain, skeletal muscle and skin. Present in thrombocytes but not in erythrocytes, which lack mitochondria. Present in all nucleated cell populations from blood, while AK1 is mostly absent. In spleen and lymph nodes, mononuclear cells lack AK1, whereas AK2 is readily detectable. These results indicate that leukocytes may be susceptible to defects caused by the lack of AK2, as they do not express AK1 in sufficient amounts to compensate for the AK2 functional deficits (at protein level).

疾病相关 Defects in AK2 are the cause of reticular dysgenesis (RDYS) [MIM:267500]; also known as aleukocytosis. RDYS is the most severe form of inborn severe combined immunodeficiencies (SCID) and is characterized by absence of granulocytes and almost complete deficiency of lymphocytes in peripheral blood, hypoplasia of the thymus and secondary lymphoid organs, and lack of innate and adaptive humoral and cellular immune functions, leading to fatal septicemia within days after birth. In bone marrow of individuals with reticular dysgenesis, myeloid differentiation is blocked at the promyelocytic stage, whereas erythro- and megakaryocytic maturation is generally normal. In addition, affected newborns have bilateral sensorineural deafness. Defects may be due to its absence in leukocytes and inner ear, in which its absence can not be compensated by AK1.

序列相似性 Belongs to the adenylate kinase family. AK2 subfamily.

细胞定位 Mitochondrion intermembrane space.



All lanes : Anti-AK2 antibody [EPR11387(B)] (ab157206) at 1/1000 dilution

Lane 1 : Wild-type HEK293T cell lysate

Lane 2 : AK2 knockout HEK293T cell lysate

Lane 3 : HL-60 cell lysate

Lane 4 : HepG2 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

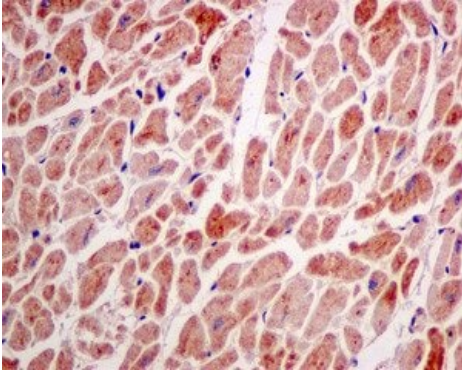
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/10000 dilution

Predicted band size: 26 kDa

Observed band size: 30 kDa

Lanes 1-4: Merged signal (red and green). Green - ab157206 observed at 30 kDa. Red - loading control **ab8245** observed at 36 kDa.

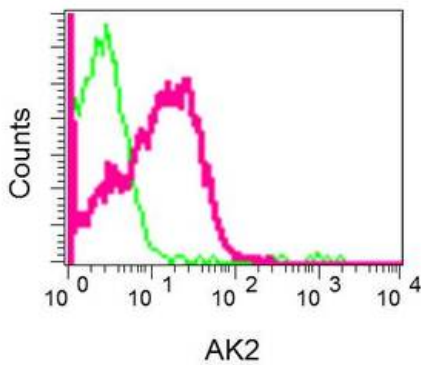
ab157206 Anti-AK2 antibody [EPR11387(B)] was shown to specifically react with AK2 in wild-type HEK293T cells. Loss of signal was observed when knockout cell line **ab266539** (knockout cell lysate **ab257825**) was used. Wild-type and AK2 knockout samples were subjected to SDS-PAGE. ab157206 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated at room temperature for 2.5 hours at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AK2 antibody
[EPR11387(B)] (ab157206)

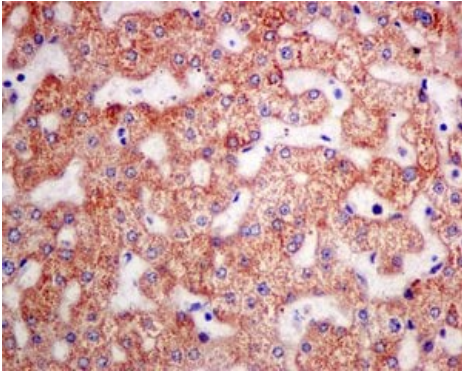
Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human heart tissue, labeling AK2 using ab157206 at a 1/50 dilution.

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



Flow Cytometry (Intracellular) - Anti-AK2 antibody
[EPR11387(B)] (ab157206)

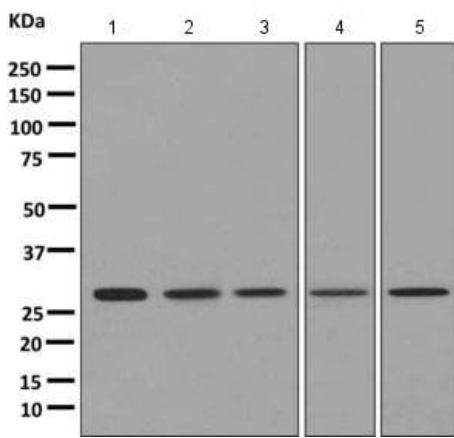
Intracellular Flow Cytometry analysis of permeabilized HeLa cells labeling AK2 (red), using ab157206 at a 1/10 dilution, and negative control cells probed with a Rabbit IgG (green)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AK2 antibody [EPR11387(B)] (ab157206)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human liver tissue, labeling AK2 using ab157206 at a 1/50 dilution.

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



Western blot - Anti-AK2 antibody [EPR11387(B)] (ab157206)

All lanes : Anti-AK2 antibody [EPR11387(B)] (ab157206) at 1/1000 dilution

Lane 1 : HepG2 lysate

Lane 2 : fetal kidney lysate

Lane 3 : fetal heart lysate





Lane 4 : HeLa lysate

Lane 5 : fetal liver lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 26 kDa

Why choose a recombinant antibody?

 Research with confidence Consistent and reproducible results	 Long-term and scalable supply Recombinant technology
 Success from the first experiment Confirmed specificity	 Ethical standards compliant Animal-free production

Anti-AK2 antibody [EPR11387(B)] (ab157206)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.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