# abcam

## Product datasheet

## Anti-Ras antibody [EPR18713-13] ab206969

重组 RabMAb

**5 References** 9图像

概述

产品名称 Anti-Ras抗体[EPR18713-13]

描述 兔单克隆抗体[EPR18713-13] to Ras

宿主 Rabbit

经测试应用 适用于: ICC/IF, Flow Cyt (Intra), WB

种属反应性 与反应: Mouse, Rat, Human, Recombinant fragment

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: Recombinant human full length K, H and N RAS protein, Human fetal brain and fetal kidney

lysates; HeLa, A431, C6 and NIH/3T3 whole cell lysates; Mouse and rat brain lysates. ICC/IF:

HeLa and NIH/3T3 cells. Flow Cyt (intra): HeLa cells.

This product is a recombinant monoclonal antibody, which offers several advantages including: 常规说明

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity - Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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 long

term. Avoid freeze / thaw cycle.

存储溶液 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯度 Protein A purified

克隆 单克隆

克隆编号 EPR18713-13

**同种型** IgG

#### 应用

The Abpromise guarantee

Abpromise™承诺保证使用ab206969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		1/200.
Flow Cyt (Intra)		1/250.
WB		1/1000. Detects a band of approximately 21 kDa (predicted molecular weight: 21 kDa).

应用说明

Is unsuitable for IP.

#### 靶标

#### 功能

#### 疾病相关

Ras proteins bind GDP/GTP and possess intrinsic GTPase activity.

Defects in HRAS are the cause of faciocutaneoskeletal syndrome (FCSS) [MIM:218040]. A rare condition characterized by prenatally increased growth, postnatal growth deficiency, mental retardation, distinctive facial appearance, cardiovascular abnormalities (typically pulmonic stenosis, hypertrophic cardiomyopathy and/or atrial tachycardia), tumor predisposition, skin and musculoskeletal abnormalities.

Defects in HRAS are the cause of congenital myopathy with excess of muscle spindles (CMEMS) [MIM:218040]. CMEMS is a variant of Costello syndrome.

Defects in HRAS may be a cause of susceptibility to Hurthle cell thyroid carcinoma (HCTC) [MIM:607464]. Hurthle cell thyroid carcinoma accounts for approximately 3% of all thyroid cancers. Although they are classified as variants of follicular neoplasms, they are more often multifocal and somewhat more aggressive and are less likely to take up iodine than are other follicular neoplasms.

Note=Mutations which change positions 12, 13 or 61 activate the potential of HRAS to transform cultured cells and are implicated in a variety of human tumors.

Defects in HRAS are a cause of susceptibility to bladder cancer (BLC) [MIM:109800]. A malignancy originating in tissues of the urinary bladder. It often presents with multiple tumors appearing at different times and at different sites in the bladder. Most bladder cancers are transitional cell carcinomas. They begin in cells that normally make up the inner lining of the bladder. Other types of bladder cancer include squamous cell carcinoma (cancer that begins in thin, flat cells) and adenocarcinoma (cancer that begins in cells that make and release mucus and other fluids). Bladder cancer is a complex disorder with both genetic and environmental influences.

Note=Defects in HRAS are the cause of oral squamous cell carcinoma (OSCC).

Belongs to the small GTPase superfamily. Ras family.

Palmitoylated by the ZDHHC9-GOLGA7 complex. A continuous cycle of de- and re-palmitoylation regulates rapid exchange between plasma membrane and Golgi.

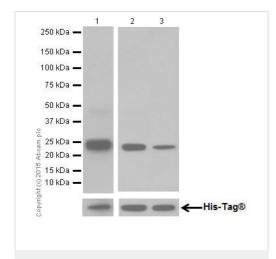
S-nitrosylated; critical for redox regulation. Important for stimulating guanine nucleotide exchange. No structural perturbation on nitrosylation.

#### TO 191

#### ####¥

序列相似性 翻译后修饰 Cell membrane. Golgi apparatus membrane. The active GTP-bound form is localized most strongly to membranes than the inactive GDP-bound form (By similarity). Shuttles between the plasma membrane and the Golgi apparatus.

## 图片



Western blot - Anti-Ras antibody [EPR18713-13] (ab206969)

**All lanes :** Anti-Ras antibody [EPR18713-13] (ab206969) at 1/5000 dilution

Lane 1: Recombinant Human KRAS full length protein

Lane 2: Recombinant Human HRAS full length protein

Lane 3: Recombinant Human NRAS full length protein

Lysates/proteins at 0.01 µg per lane.

## Secondary

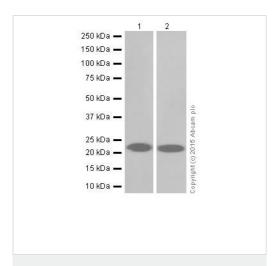
**All lanes :** Goat Anti-Rabbit  $\lg G \ H\&L \ (HRP) \ (\underline{ab97051})$  at 1/100000 dilution

**Predicted band size:** 21 kDa **Observed band size:** 21 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1: 1 second; Lane 2 and 3: 5 seconds.

Recombinant Human RAS full length protein contains aa1-189 with an N-terminal His-Tag®. Recombinant Human HRAS full length protein contains aa1-189 with an N-terminal His-Tag®. Recombinant Human NRAS full length protein contains aa1-189 with an N-terminal His-Tag®. All three recombinant proteins were made in house.



Western blot - Anti-Ras antibody [EPR18713-13] (ab206969)

**Lane 1**: Anti-Ras antibody [EPR18713-13] (ab206969) at 1/2000 dilution

**Lane 2**: Anti-Ras antibody [EPR18713-13] (ab206969) at 1/1000 dilution

Lane 1 : Human fetal brain lysate

Lane 2 : Human fetal kidney lysate

Lysates/proteins at 10 µg per lane.

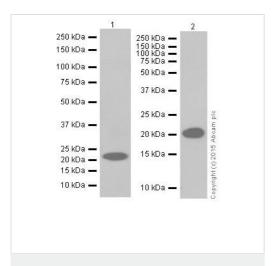
## **Secondary**

**All lanes :** Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/10000 dilution

**Predicted band size:** 21 kDa **Observed band size:** 21 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Ras antibody [EPR18713-13] (ab206969)

**All lanes :** Anti-Ras antibody [EPR18713-13] (ab206969) at 1/1000 dilution

**Lane 1 :** HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate

Lane 2: A431 (Human epidermoid carcinoma) whole cell lysate

Lysates/proteins at 10 µg per lane.

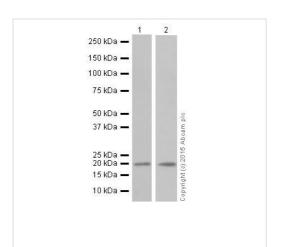
## Secondary

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

**Predicted band size:** 21 kDa **Observed band size:** 21 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Ras antibody [EPR18713-13] (ab206969)

**Lane 1 :** Anti-Ras antibody [EPR18713-13] (ab206969) at 1/2000 dilution

**Lane 2**: Anti-Ras antibody [EPR18713-13] (ab206969) at 1/1000 dilution

Lane 1: C6 (Rat glial tumor cells) whole cell lysate

Lane 2: NIH/3T3 (Mouse embyro fibroblast cells) whole cell lysate

Lysates/proteins at 10 µg per lane.

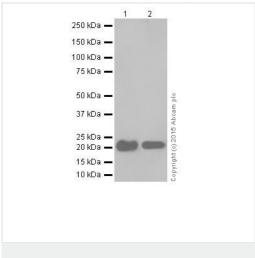
#### Secondary

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

**Predicted band size:** 21 kDa **Observed band size:** 21 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Ras antibody [EPR18713-13] (ab206969)

**All lanes :** Anti-Ras antibody [EPR18713-13] (ab206969) at 1/2000 dilution

Lane 1 : Mouse brain lysate

Lane 2: Rat brain lysate

Lysates/proteins at 10 µg per lane.

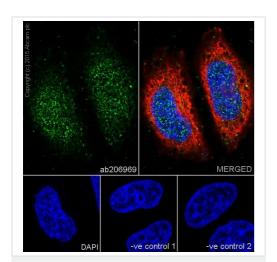
## **Secondary**

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/100000 dilution

**Predicted band size:** 21 kDa **Observed band size:** 21 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

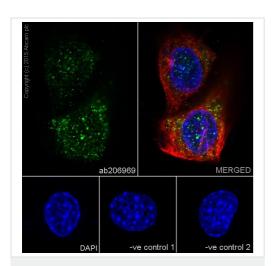


Immunocytochemistry/ Immunofluorescence - Anti-Ras antibody [EPR18713-13] (ab206969) Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling RAS with ab206969 at 1/200 dilution, followed by Goat anti-rabbit lgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasm and nuclear staining on HeLa cell line. The nuclear counterstain is DAPI (blue). Tubulin is detected with ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution and ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution (red).

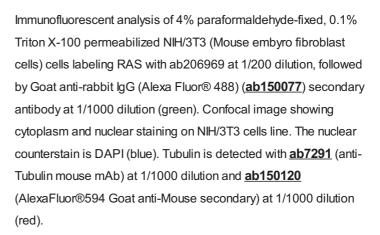
The negative controls are as follows:-

-ve control 1: ab206969 at 1/200 dilution followed by <u>ab150120</u> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.

-ve control 2: <u>ab7291</u> (anti-Tubulin mouse mAb) at 1/1000 dilution followed by <u>ab150077</u> (Alexa Fluor®488 Goat Anti-Rabbit lgG H&L) at 1/1000 dilution.



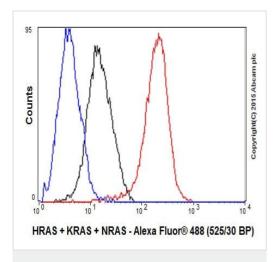
Immunocytochemistry/ Immunofluorescence - Anti-Ras antibody [EPR18713-13] (ab206969)



The negative controls are as follows:-

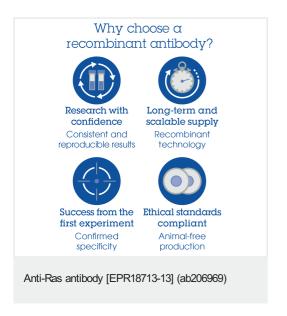
-ve control 1: ab206969 at 1/200 dilution followed by <u>ab150120</u> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.

-ve control 2: <u>ab7291</u> (anti-Tubulin mouse mAb) at 1/1000 dilution followed by <u>ab150077</u> (Alexa Fluor®488 Goat Anti-Rabbit lgG H&L) at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-Ras antibody [EPR18713-13] (ab206969)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling RASwith ab206969 at 1/250 dilution (red) compared with a rabbit monoclonal IgG isotype control (ab172730; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (FITC) at 1/500 dilution was used as the secondary antibody.



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