abcam

Product datasheet

Anti-GTPase HRAS antibody [Y132] ab32417





重组 RabMAb

★★★★★ 6 Abreviews 18 References 6 图像

概述

产品名称 Anti-GTPase HRAS抗体[Y132]

描述 兔单克隆抗体[Y132] to GTPase HRAS

宿主 Rabbit

特异性 Reactivity with other RAS members has not been tested.

经测试应用 适用于: WB, IP

不适用于: IHC

种属反应性 与反应: Mouse, Rat, Human

预测可用于: Chicken 4

免疫原 Synthetic peptide within Human GTPase HRAS aa 150 to the C-terminus (C terminal). The exact

sequence is proprietary.

阳性对照 MCF7 and PC12 cell lysates and MCF7 cells.

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

- 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.

Avoid freeze / thaw cycle.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯度 Protein A purified

 克隆
 单克隆

 克隆编号
 Y132

 同种型
 laG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab32417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	★★★ ☆★ (6)	1/500 - 1/1000. Detects a band of approximately 21 kDa.
IP		1/50 - 1/60.

应用说明

Is unsuitable for IHC.

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).

序列相似性

翻译后修饰

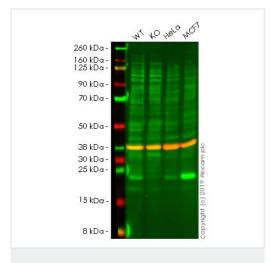
Belongs to the small GTPase superfamily. Ras family.

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.

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-GTPase HRAS antibody [Y132] (ab32417)

All lanes : Anti-GTPase HRAS antibody [Y132] (ab32417) at 1/500 dilution

Lane 1 : Wild-type HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate

Lane 2: HRAS knockout HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate

Lane 3: HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

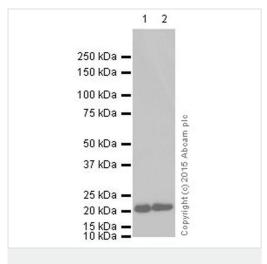
Lane 4: MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

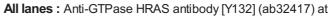
Performed under reducing conditions.

Lanes 1 - 4: Merged signal (red and green). Green - ab32417 observed at 21 kDa. Red - loading control, <u>ab8245</u>, observed at 37 kDa.

ab32417 was shown to recognize HRAS in wild-type HEK-293 cells as signal was lost at the expected MW in HRAS knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and HRAS knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% Milk. Ab32417 and ab8245 (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/500 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse lgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-GTPase HRAS antibody [Y132] (ab32417)



1/2500 dilution (purified)

Lane 1 : mouse brain lysate

Lane 2: rat brain lysate

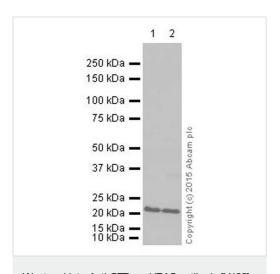
Lysates/proteins at 10 µg per lane.

Secondary

All lanes: HRP goat anti-rabbit lgG (H+L) at 1/20000 dilution

Observed band size: 21 kDa

Blocking buffer: 5% NFDM/TBST Dilution buffer: 5% NFDM/TBST



Western blot - Anti-GTPase HRAS antibody [Y132] (ab32417)

All lanes: Anti-GTPase HRAS antibody [Y132] (ab32417) at

1/1000 dilution (purified)

Lane 1 : MCF7 cell lysate

Lane 2 : HeLa cell lysate

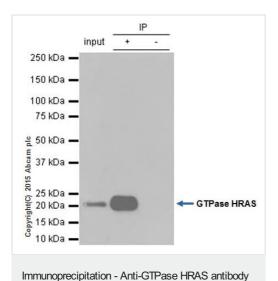
Lysates/proteins at 10 µg per lane.

Secondary

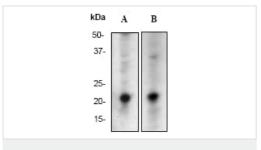
All lanes: HRP goat anti-rabbit lgG (H+L) at 1/20000 dilution

Observed band size: 21 kDa

Blocking buffer: 5% NFDM/TBST Dilution buffer: 5% NFDM/TBST



ab32417 (purified) at 1/60 immunoprecipitating GTPase in 10 μ g mouse brain whole cell lysate (Lanes 1 and 2, observed at 21 kDa). Lane 3 - PBS. For western blotting, HRP Veriblot for IP Detection Reagent (ab131366) was used for detection (1/10 000). Blocking buffer and concentration: 5% NFDM/TBST Dilution buffer and concentration: 5% NFDM/TBST



[Y132] (ab32417)

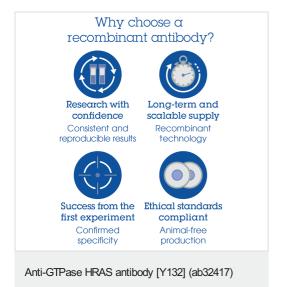
Western blot - Anti-GTPase HRAS antibody [Y132] (ab32417)

All lanes : Anti-GTPase HRAS antibody [Y132] (ab32417) at 1/500 dilution (unpurified)

Lane 1 : MCF7 cell lysate

Lane 2 : PC12 cell lysate

Observed band size: 21 kDa



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