abcam

Product datasheet

Anti-Ras antibody [EP1125Y] ab52939

יעלאעבע RabMAb

★★★★★ 12 Abreviews 68 References 画像数9

製品の概要

製品名 Anti-Ras antibody [EP1125Y]

製品の詳細 Rabbit monoclonal [EP1125Y] to Ras

由来種 Rabbit

特異性 This antibody is predicted to react with H-Ras, N-Ras and K-Ras.

アプリケーション 適用あり: Flow Cyt (Intra), ICC/IF, WB, IP

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール Flow Cyt (intra): PC-12 cells. WB: Jurkat, 293T, RAW 246.7, Neuro-2a, PC-12 and C6 lysates;

Human Ras full length protein. ICC/IF: MCF7 cells. IP: Jurkat whole cell lysate.

特記事項 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**.

製品の特性

製品の状態 Liquid

保存方法 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.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

精製度 Protein A purified

ポリモノ モノクローナル

クローン名 EP1125Y

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab52939の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/30. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody. For unpurified use at 1/100.
ICC/IF		1/500.
WB	★★★★ (9)	1/5000. Detects a band of approximately 21 kDa (predicted molecular weight: 21 kDa). For unpurified use at 1/10000-1/50000.
IP	*** <u>*</u>	1/20. For unpurified use at 1/30.

ターゲット情報

機能

関連疾患

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.

配列類似性

翻訳後修飾

Palmitoylated by the ZDHHC9-GOLGA7 complex. A continuous cycle of de- and re-palmitoylation

regulates rapid exchange between plasma membrane and Golgi.

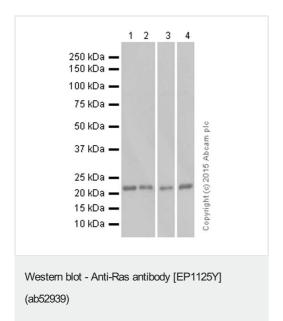
 $S-nitrosylated; critical for redox \, regulation. \, Important \, for \, stimulating \, guanine \, nucleotide \, exchange.$

No structural perturbation on nitrosylation.

細胞内局在

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.

画像



All lanes : Anti-Ras antibody [EP1125Y] (ab52939) at 1/5000 dilution (purified)

Lane 1 : Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysates

Lane 2: HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysates

Lane 3 : RAW 264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysates

Lane 4 : Neuro-2a (mouse neuroblastoma cell line) whole cell lysates

Lysates/proteins at 20 µg per lane.

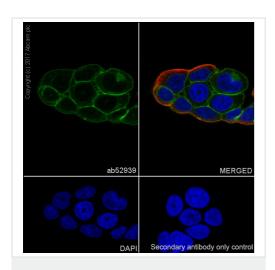
Secondary

All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000

dilution

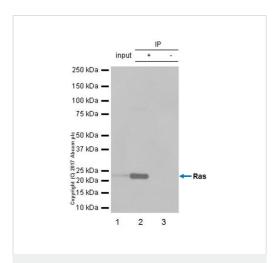
Predicted band size: 21 kDa **Observed band size:** 21 kDa

Blocking and diluting buffer: 5% NFDM/TBST



Immunocytochemistry/ Immunofluorescence - Anti-Ras antibody [EP1125Y] (ab52939)

Immunocytochemistry analysis of MCF7 (human breast adenocarcinoma cell line) cells labeling Ras with Purified ab52939 at 1:500 dilution. Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor ® 594) 1:200 (2.5 µg/ml). ab150077 Goat anti rabbit lgG(Alexa Fluor ® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunoprecipitation - Anti-Ras antibody [EP1125Y] (ab52939)

ab52939 (purified) at 1:20 dilution (2 μ g) immunoprecipitating Ras in Jurkat whole cell lysate.

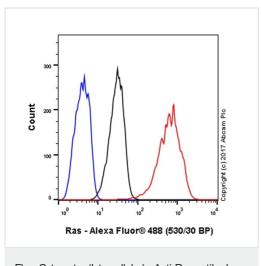
Lane 1 (input): Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate 10µg

Lane 2 (+): ab52939 & Jurkat whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab52939 in Jurkat whole cell lysate

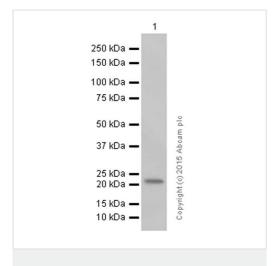
For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.



Intracellular Flow Cytometry analysis of PC-12 (rat adrenal gland pheochromocytoma cell line) cells labeling Ras with purified ab52939 at 1/30 dilution (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit lgG (Alexa Fluor[®] 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal lgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).





Western blot - Anti-Ras antibody [EP1125Y] (ab52939)

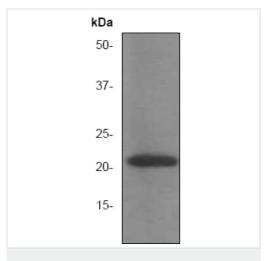
Anti-Ras antibody [EP1125Y] (ab52939) at 1/5000 dilution (purified) + PC-12 (rat adrenal gland pheochromocytoma cell line) whole cell lysates at 15 μg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 21 kDa

Blocking and diluting buffer: 5% NFDM/TBST.



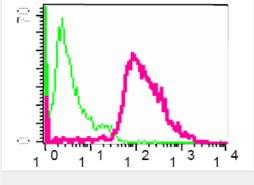
Western blot - Anti-Ras antibody [EP1125Y] (ab52939)

Anti-Ras antibody [EP1125Y] (ab52939) at 1/500000 dilution (unpurified) + C6 (rat glial tumor cell line) cell lysate at 10 µg/ml

Secondary

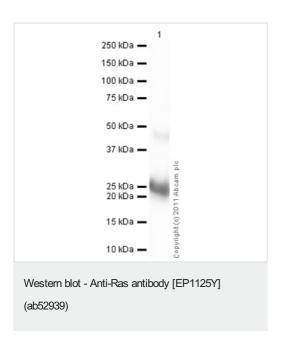
goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 21 kDa **Observed band size:** 18 kDa



Flow Cytometry (Intracellular) - Anti-Ras antibody [EP1125Y] (ab52939)

Unpurified ab52939 at 1/100 dilution staining Ras in permeabilized PC-12 (rat adrenal gland pheochromocytoma cell line) cells by intracellular flow cytometry (red). Rabbit IgG negative control (green).



Anti-Ras antibody [EP1125Y] (ab52939) at 1/500 dilution (unpurified) + Human Ras full length protein (ab56526) at 0.01 µg

Secondary

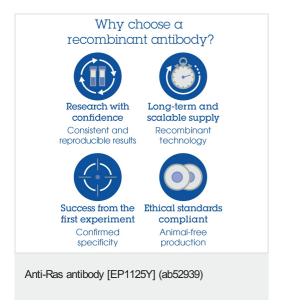
Goat Anti-Rabbit $\lg G$ H&L (HRP) preadsorbed ($\frac{ab97080}{1}$) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 21 kDa

Exposure time: 1 minute



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.co.jp/abpromise or contact our technical team.

Terms and conditions

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