abcam

Product datasheet

Anti-FGFR1 (phospho Y654) antibody ab59194

★★★★★ 3 Abreviews 34 References 画像数 8

製品の概要

製品名 Anti-FGFR1 (phospho Y654) antibody

製品の詳細 Rabbit polyclonal to FGFR1 (phospho Y654)

由来種 Rabbit

特異性 Binds human and mouse FGFR1 only when phosphorylated at tyrosine 654 and rat FGFR1 only

when phosphorylated at tyrosine 561.

アプリケーション 適用あり: ICC/IF, IHC-P, WB

種交差性 交差種: Mouse, Rat, Human, African green monkey

免疫原 Synthetic peptide corresponding to Human FGFR1 aa 600-700 (phospho Y654). Synthetic

phosphopeptide (Human) from around the phosphorylation site of tyrosine 654 (DYYPKK)

Database link: P11362

ポジティブ・コントロール WB: 293 and HeLa cell lysates treated with EGF, 293 cell extract treated with insulin. IHC-P:

Human breast adenocarcinoma, mouse kidney. ICC/IF: SKNSH cells. COS7 cells. IF: Rat lung.

特記事項

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

バッファー pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: PBS, 50% Glycerol, 0.87% Sodium chloride

Without Mg+2 and Ca+2

精製度 Immunogen affinity purified

特記事項(精製) Affinity purified from rabbit antiserum by affinity chromatography using epitope specific

1

phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

ポリ/モノ ポリクローナル

アイソタイプ IgG

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ab59194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
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration.
WB	★★ ★ ★ ★ (1)	1/500 - 1/1000. Detects a band of approximately 117 kDa (predicted molecular weight: 92 kDa).

ターゲット情報

機能

組織特異性

関連疾患

Receptor for basic fibroblast growth factor. Receptor for FGF23 in the presence of KL (By similarity). A shorter form of the receptor could be a receptor for FGF1 (aFGF).

Detected in astrocytoma, neuroblastoma and adrenal cortex cell lines. Some isoforms are detected in foreskin fibroblast cell lines, however isoform 17, isoform 18 and isoform 19 are not detected in these cells.

Defects in FGFR1 are a cause of Pfeiffer syndrome (PS) [MIM:101600]; also known as acrocephalosyndactyly type V (ACS5). PS is characterized by craniosynostosis (premature fusion of the skull sutures) with deviation and enlargement of the thumbs and great toes, brachymesophalangy, with phalangeal ankylosis and a varying degree of soft tissue syndactyly. Defects in FGFR1 are a cause of idiopathic hypogonadotropic hypogonadism (IHH) [MIM:146110]. IHH is defined as a deficiency of the pituitary secretion of follicle-stimulating hormone and luteinizing hormone, which results in the impairment of pubertal maturation and of reproductive function.

Defects in FGFR1 are the cause of Kallmann syndrome type 2 (KAL2) [MIM:147950]; also known as hypogonadotropic hypogonadism and anosmia. Anosmia or hyposmia is related to the absence or hypoplasia of the olfactory bulbs and tracts. Hypogonadism is due to deficiency in gonadotropin-releasing hormone and probably results from a failure of embryonic migration of gonadotropin-releasing hormone-synthesizing neurons. In some cases, midline cranial anomalies (cleft lip/palate and imperfect fusion) are present and anosmia may be absent or inconspicuous. Defects in FGFR1 are the cause of osteoglophonic dysplasia (OGD) [MIM:166250]; also known as osteoglophonic dwarfism. OGD is characterized by craniosynostosis, prominent supraorbital ridge, and depressed nasal bridge, as well as by rhizomelic dwarfism and nonossifying bone lesions. Inheritance is autosomal dominant.

Defects in FGFR1 are the cause of trigonocephaly non-syndromic (TRICEPH) [MIM:190440]; also known as metopic craniosynostosis. The term trigonocephaly describes the typical keel-shaped deformation of the forehead resulting from premature fusion of the frontal suture. Trigonocephaly may occur also as a part of a syndrome.

Note=A chromosomal aberration involving FGFR1 may be a cause of stem cell leukemia lymphoma syndrome (SCLL). Translocation t(8;13)(p11;q12) with ZMYM2. SCLL usually presents as lymphoblastic lymphoma in association with a myeloproliferative disorder, often accompanied by pronounced peripheral eosinophilia and/or prominent eosinophilic infiltrates in the affected bone marrow.

Note=A chromosomal aberration involving FGFR1 may be a cause of stem cell myeloproliferative disorder (MPD). Translocation t(6;8)(q27;p11) with FGFR1OP. Insertion ins(12;8)(p11;p11p22) with FGFR1OP2. MPD is characterized by myeloid hyperplasia, eosinophilia and T-cell or B-cell lymphoblastic lymphoma. In general it progresses to acute myeloid leukemia. The fusion proteins FGFR1OP2-FGFR1, FGFR1OP-FGFR1 or FGFR1-FGFR1OP may exhibit constitutive kinase activity and be responsible for the transforming activity.

Note=A chromosomal aberration involving FGFR1 may be a cause of stem cell myeloproliferative disorder (MPD). Translocation t(8;9)(p12;q33) with CEP110. MPD is characterized by myeloid hyperplasia, eosinophilia and T-cell or B-cell lymphoblastic lymphoma. In general it progresses to acute myeloid leukemia. The fusion protein CEP110-FGFR1 is found in the cytoplasm, exhibits constitutive kinase activity and may be responsible for the transforming activity.

配列類似性

Belongs to the protein kinase superfamily. Tyr protein kinase family. Fibroblast growth factor receptor subfamily.

Contains 3 lg-like C2-type (immunoglobulin-like) domains.

Contains 1 protein kinase domain.

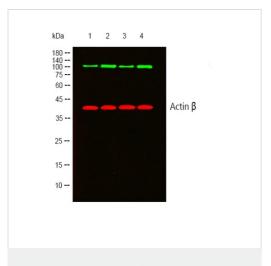
翻訳後修飾

Binding of FGF1 and heparin promotes autophosphorylation on tyrosine residues and activation of the receptor.

細胞内局在

Membrane. Nucleus. Cytoplasm. Cytoplasmic vesicle

画像



Western blot - Anti-FGFR1 (phospho Y654) antibody (ab59194)

All lanes : Anti-FGFR1 (phospho Y654) antibody (ab59194) at 1/1000 dilution

Lane 1: 293 untreated lysates

Lane 2: 293 treated with 200 ng/mL EGF for 30 minutes

Lane 3: HeLa untreated lysates

Lane 4: HeLa treated with 200 ng/mL EGF for 30 minutes

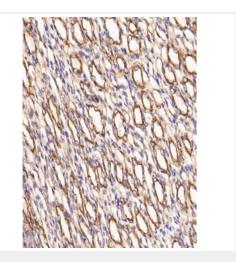
Lysates/proteins at 20 µg per lane.

Secondary

All lanes: Goat Anti-Rabbit lgG (H+L) HRP at 1/10000 dilution

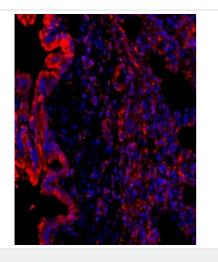
Predicted band size: 92 kDa **Observed band size:** 156 kDa

Loading control: Beta Actin



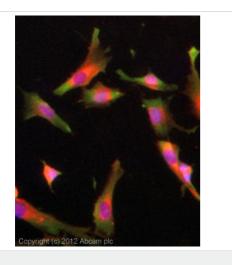
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FGFR1 (phospho Y654) antibody (ab59194)

Immunohistochemical analysis of paraffin-embedded mouse kidney tissue using FGFR1 (phospho Y654) antibody (ab59194) at 1/200 dilution. Primary antibody was incubated at 4°C overnight. Antigen retrieval was Tris-EDTA,pH8.0. Secondary antibody was diluted at 1/200 and incubation was at room temperature for 30 minutes.



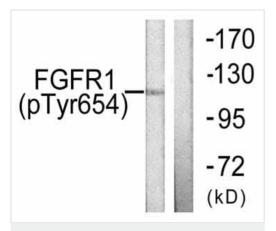
Immunocytochemistry/ Immunofluorescence - Anti-FGFR1 (phospho Y654) antibody (ab59194)

Immunofluorescent analysis of rat lung tissue labeling FGFR1 (phospho Y654) with ab59194 at 1/200 at 4°C overnight. Alexa flour 594 labeled Secondary antibody was diluted at 1:2000 (room temperature, 50min).



Immunocytochemistry/ Immunofluorescence - Anti-FGFR1 (phospho Y654) antibody (ab59194)

ICC/IF image of ab59194 stained SKNSH cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab59194, 5 μ g/ml) overnight at +4°C. The secondary antibody (green) was **ab96899**, DyLight® 488 goat anti-rabbit lgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 μ M.



Western blot - Anti-FGFR1 (phospho Y654) antibody (ab59194)

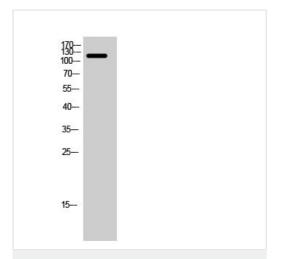
All lanes : Anti-FGFR1 (phospho Y654) antibody (ab59194) at 1/500 dilution

Lane 1: 293 cell extract treated with insulin (0.01U/ml, 15 mins)

Lane 2: 293 cell extract treated with insulin (0.01U/ml, 15 mins)

with immunizing phosphopeptide

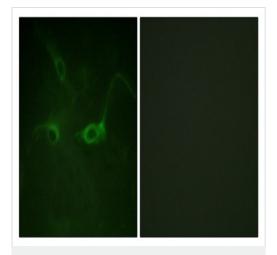
Predicted band size: 92 kDa **Observed band size:** 120 kDa



Western blot - Anti-FGFR1 (phospho Y654) antibody (ab59194)

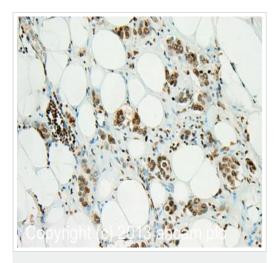
Anti-FGFR1 (phospho Y654) antibody (ab59194) at 1/1000 dilution + HeLa cell lysate

Predicted band size: 92 kDa



Immunocytochemistry/ Immunofluorescence - Anti-FGFR1 (phospho Y654) antibody (ab59194)

Immunofluorescent analysis of COS7 cells labeling FGFR1 (phospho-Tyr654) with ab59194 at 1:100. The image on the right is blocked with the phosphopeptide prior to imunnoflurescent labeling.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FGFR1 (phospho Y654) antibody (ab59194)

IHC image of FGFR1 (phospho Y654) staining in Human breast adenocarcinoma formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab59194, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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