abcam

Product datasheet

Anti-FGFR1 antibody [EPR806Y] ab76464

敲除验证 重组 RabMAb

★★★★★ 2 Abreviews 32 References 6 图像

概述

产品名称	Anti-FGFR1抗体[EPR806Y]
描述	兔单克隆抗体[EPR806Y] to FGFR1
宿主	Rabbit
经测试应用	**适用于:** ICC/IF, WB, IP **不适用于:** IHC-P
种属反应性	**与反应:** Human
免疫原	Synthetic peptide within Human FGFR1 aa 800 to the C-terminus (C terminal). The exact sequence is proprietary. Database link: **P11362** (Peptide available as **ab177436**)
阳性对照	WB: Wild-type HAP1, MCF-7 and SH-SY5Y cell lysate. IP: A-204 cell lysate ICC/IF: SH-SY5Y 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**. Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR806Y
同种型	IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab76464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		1/100.
WB		1/500. Predicted molecular weight: 92 kDa.
IP		1/190.

应用说明 Is unsuitable for IHC-P.

靶标

功能 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).

组织特异性 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.

疾病相关 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.

序列相似性

Belongs to the protein kinase superfamily. Tyr protein kinase family. Fibroblast growth factor receptor subfamily.
Contains 3 Ig-like C2-type (immunoglobulin-like) domains.
Contains 1 protein kinase domain.

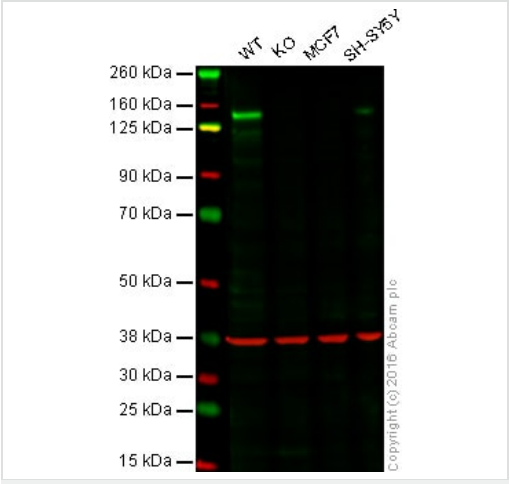
翻译后修饰

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

细胞定位

Membrane. Nucleus. Cytoplasm. Cytoplasmic vesicle

图片

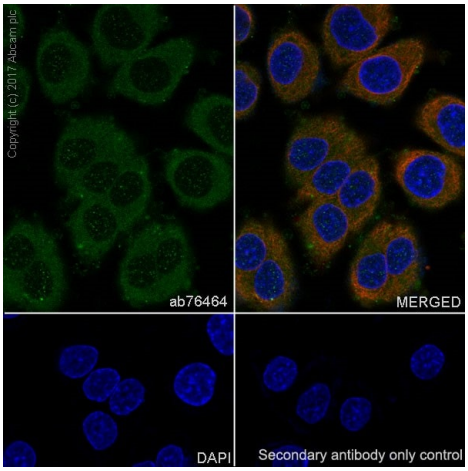


Western blot - Anti-FGFR1 antibody [EPR806Y] (ab76464)

Lane 1: Wild type HAP1 whole cell lysate (20 µg)
Lane 2: FGFR1 knockout HAP1 whole cell lysate (20 µg)
Lane 3: MCF7 whole cell lysate (20 µg)
Lane 4: SH-SY5Y whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab76464 observed at 140 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

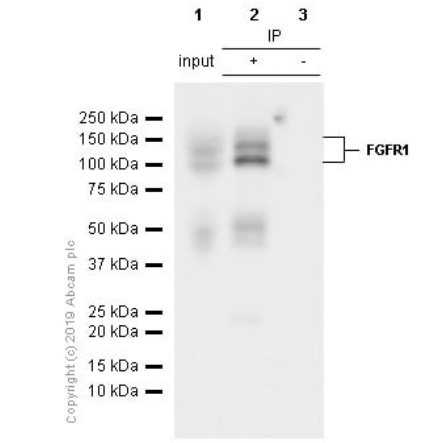
ab76464 was shown to specifically react with FGFR1 when FGFR1 knockout samples were used. Wild-type and FGFR1 knockout samples were subjected to SDS-PAGE. ab76464 and **ab8245** (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1 µg/mL and 1/10000 dilution respectively. Blots were developed with 800CW Goat anti Rabbit and 680CW Goat anti Mouse secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-FGFR1 antibody [EPR806Y] (ab76464)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized SH-SY5Y (Human neuroblastoma epithelial cell) cells labelling FGFR1 with at 1/100 dilution, followed by **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic and weak nuclear staining in SH-SY5Y cell line is observed. Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

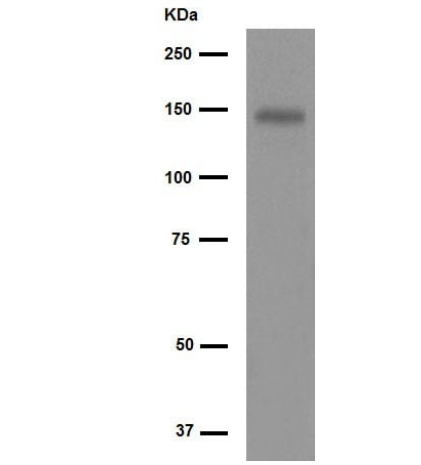
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.



Immunoprecipitation - Anti-FGFR1 antibody [EPR806Y] (ab76464)

ab76464 (purified) at 1/190 immunoprecipitating FGFR1 in 10 µg A-204 (Human muscle rhabdomyosarcoma)whole cell lysate (**Lanes 1 and 2**, observed at 145 kDa). **Lane 3** - Rabbit monoclonal IgG (**ab172730**) instead of ab76464 in A-204 whole cell lysate. For western blotting, ab76464 at 1/500 and VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/1000 dilution.

Blocking/Dilution buffer and concentration: 5% NFDM/TBST.



Western blot - Anti-FGFR1 antibody [EPR806Y] (ab76464)

Anti-FGFR1 antibody [EPR806Y] (ab76464) at 1/500 dilution (purified) + SH-SY5Y (Human neuroblastoma cell line from bone marrow) cell lysate at 10 µg

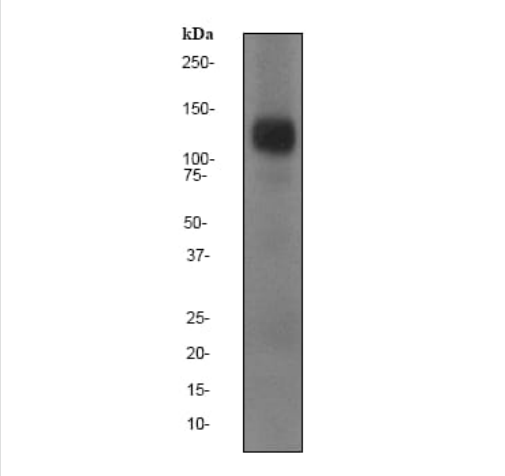
Secondary

Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 92 kDa

Observed band size: 145 kDa

Blocking/Dilution buffer and concentration: 5% NFDM/TBST.



Western blot - Anti-FGFR1 antibody [EPR806Y] (ab76464)

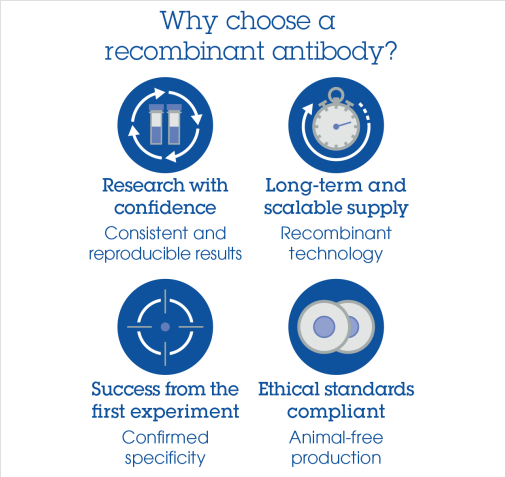
Anti-FGFR1 antibody [EPR806Y] (ab76464) at 1/500 dilution (unpurified) + SH-SY5Y (Human neuroblastoma cell line from bone marrow) cell lysate at 10 µg

Secondary

HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

Predicted band size: 92 kDa

Observed band size: 130 kDa



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