

Product datasheet

Anti-FGFR2 antibody ab10648

★★★★☆ 5 Abreviews 28 References 2 Images

Overview

Product name	Anti-FGFR2 antibody
Description	Rabbit polyclonal to FGFR2
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, WB, IP, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide: APGREKEITASPK conjugated to KLH by a Glutaraldehyde linker, corresponding to amino acids 362-374 of Human FGFR2.

[Run BLAST with](#)

[Run BLAST with](#)

Positive control

[Purchase matching WB positive control:
Recombinant human FGFR2 protein >](#)

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 15mM Sodium Azide Constituents: 0.01M PBS, 1% BSA. pH 7.4
Purity	Immunogen affinity purified
Purification notes	The antibody is affinity-purified using the immunizing peptide immobilized on agarose.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab10648** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★★☆	Use at an assay dependent concentration.
WB	★★★★☆	1/2000. Predicted molecular weight: 110 kDa. 1/2000 this dilution is determined by blotting using a whole extract of transfected cells expressing recombinant human FGFR2. Predicted molecular weight: 110 kDa.
IP		1/1000. 1/1000, this dilution is determined by immunoprecipitation using a whole lysate of transfected cells expressing recombinant human FGFR2.
IHC-P	★★★★★	1/1000. Perform enzymatic antigen retrieval before commencing with IHC staining protocol. The recommended enzyme is trypsin.

Target

Function

Receptor for acidic and basic fibroblast growth factors.

Involvement in disease

Defects in FGFR2 are the cause of Crouzon syndrome (CS) [MIM:123500]; also called craniofacial dysostosis type I (CFD1). CS is an autosomal dominant syndrome characterized by craniosynostosis (premature fusion of the skull sutures), hypertelorism, exophthalmos and external strabismus, parrot-beaked nose, short upper lip, hypoplastic maxilla, and a relative mandibular prognathism.

Defects in FGFR2 are a cause of Jackson-Weiss syndrome (JWS) [MIM:123150]. JWS is an autosomal dominant craniosynostosis syndrome characterized by craniofacial abnormalities and abnormality of the feet: broad great toes with medial deviation and tarsal-metatarsal coalescence. Defects in FGFR2 are a cause of Apert syndrome (APRS) [MIM:101200]; also known as acrocephalosyndactyly type 1 (ACS1). APRS is a syndrome characterized by facio-cranio-synostosis, osseous and membranous syndactyly of the four extremities, and midface hypoplasia. The craniosynostosis is bicoronal and results in acrocephaly of brachysphenocephalic type. Syndactyly of the fingers and toes may be total (mitten hands and sock feet) or partial affecting the second, third, and fourth digits. Intellectual deficit is frequent and often severe, usually being associated with cerebral malformations.

Defects in FGFR2 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. Three subtypes of Pfeiffer syndrome have been described: mild autosomal dominant form (type 1); cloverleaf skull, elbow ankylosis, early death, sporadic (type 2); craniosynostosis, early demise, sporadic (type 3).

Defects in FGFR2 are the cause of Beare-Stevenson cutis gyrata syndrome (BSCGS) [MIM:123790]. BSCGS is an autosomal dominant condition is characterized by the furrowed skin disorder of cutis gyrata, acanthosis nigricans, craniosynostosis, craniofacial dysmorphism, digital anomalies, umbilical and anogenital abnormalities and early death.

Defects in FGFR2 are the cause of familial scaphocephaly syndrome (FSPC) [MIM:609579]; also known as scaphocephaly with maxillary retrusion and mental retardation. FSPC is an autosomal dominant craniosynostosis syndrome characterized by scaphocephaly, macrocephaly, hypertelorism, maxillary retrusion, and mild intellectual disability. Scaphocephaly is the most common of the craniosynostosis conditions and is characterized by a long, narrow head. It is due to premature fusion of the sagittal suture or from external deformation.

Defects in FGFR2 are a cause of lacrimo-auriculo-dento-digital syndrome (LADDS) [MIM:149730]; also known as Levy-Hollister syndrome. LADDS is a form of ectodermal dysplasia,

a heterogeneous group of disorders due to abnormal development of two or more ectodermal structures. LADDs is an autosomal dominant syndrome characterized by aplastic/hypoplastic lacrimal and salivary glands and ducts, cup-shaped ears, hearing loss, hypodontia and enamel hypoplasia, and distal limb segments anomalies. In addition to these cardinal features, facial dysmorphism, malformations of the kidney and respiratory system and abnormal genitalia have been reported. Craniosynostosis and severe syndactyly are not observed.

Defects in *FGFR2* are the cause of Antley-Bixler syndrome (ABS) [MIM:207410]. ABS is a multiple congenital anomaly syndrome characterized by craniosynostosis, radiohumeral synostosis, midface hypoplasia, malformed ears, arachnodactyly and multiple joint contractures. ABS is a heterogeneous disorder and occurs with and without abnormal genitalia in both sexes.

Sequence similarities

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

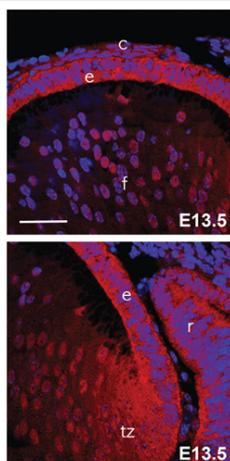
Contains 3 Ig-like C2-type (immunoglobulin-like) domains.

Contains 1 protein kinase domain.

Cellular localization

Secreted and Cell membrane.

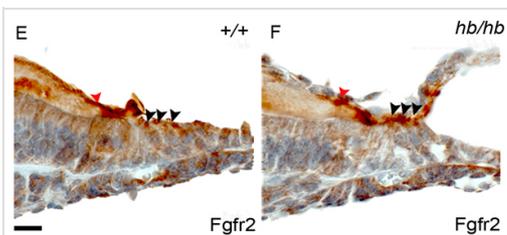
Images



ab10648 staining *FGFR2* in the epithelium (top) and transition zone (bottom) of Embryonic Mouse eye tissue sections by Immunohistochemistry (IHC) paraffin-embedded sections). Tissue was fixed, embedded in paraffin and sectioned. Sections were trypsinized for 40 minutes at room temperature in a humidified chamber, washed in PBS, and then incubated for 1 hour with a 0.5% Triton X-100 and 0.3 M glycine in PBS in a humidified chamber. After antigen retrieval, sections were blocked in 0.5% nonfat dry milk, 10% horse serum, and 0.2% Triton X-100 diluted in PBS for 3 hours at room temperature. An Alexa Fluor®568-conjugated Goat anti-rabbit polyclonal was used as the secondary antibody.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-*FGFR2* antibody (ab10648)

Image from Lee S et al., PLoS One. 2014;9(5):e97470. Fig 6.; doi: 10.1371/journal.pone.0097470.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FGFR2 antibody (ab10648)

Image from Buniello A et al., PLoS One. 2013;8(2):e56274. Fig S6.; doi: 10.1371/journal.pone.0056274.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded analysis of hb/hb and control mouse embryo (P5) tissue sections labelling FGFR2 with ab10648. Samples were fixed overnight at 4°C in 10% neutral-buffered formalin, embedded in paraffin and cut into 8µm sections.

At this stage, FGFR2 is located in hair cells (black arrowheads) and tectorial membrane (red arrowhead). No significant differences in the Fgfr2 protein levels are detected in hb/hb mutants compared to controls. Scale bar: 10µm.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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.com/abpromise> or contact our technical team.

Terms and conditions

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