Product datasheet

Anti-FGF2 antibody ab8880

Product name: Anti-FGF2 antibody
Description: Rabbit polyclonal to FGF2
Host species: Rabbit
Tested applications: Suitable for: IHC-Fr, ICC/IF
Species reactivity: Reacts with: Mouse, Human
Immunogen: Synthetic peptide within Cow FGF2 aa 1-23. The exact sequence is proprietary.
Positive control: ICC/IF: HepG2 cells. IHC-Fr: Mouse brain and olfactory epithelium tissue.

Properties
Form: Liquid
Storage buffer: Liquid antiserum
Purity: Whole antiserum
Clonality: Polyclonal
Isotype: IgG

Applications
Our Abpromise guarantee covers the use of ab8880 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>IHC-Fr</td>
<td>★★★★★</td>
<td>Use at an assay dependent concentration. PubMed: 21187124</td>
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<tr>
<td>ICC/IF</td>
<td>★★★★☆</td>
<td>1/200.</td>
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Function
Plays an important role in the regulation of cell survival, cell division, angiogenesis, cell differentiation and cell migration. Functions as potent mitogen in vitro. Can induce angiogenesis (PubMed:23469107).

Tissue specificity
Expressed in granulosa and cumulus cells. Expressed in hepatocellular carcinoma cells, but not in non-cancerous liver tissue.

Sequence similarities
Belongs to the heparin-binding growth factors family.

Post-translational modifications
Phosphorylation at Tyr-215 regulates FGF2 unconventional secretion. Several N-termini starting at positions 94, 125, 126, 132, 143 and 162 have been identified by direct sequencing.

Cellular localization
Secreted. Nucleus. Exported from cells by an endoplasmic reticulum (ER)/Golgi-independent mechanism. Unconventional secretion of FGF2 occurs by direct translocation across the plasma membrane. Binding of exogenous FGF2 to FGFR facilitates endocytosis followed by translocation of FGF2 across endosomal membrane into the cytosol. Nuclear import from the cytosol requires the classical nuclear import machinery, involving proteins KPNA1 and KPNB1, as well as CEP57.

Images
ICC/IF image of ab8880 stained HepG2 cells. The cells were 100% methanol fixed (5 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 (ab8880, 1/200 dilution) overnight at +4°C. The secondary antibody (green) was ab96899, DyLight® 488 goat anti-rabbit IgG (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 1.43µM.

Immunohistochemical analysis of mouse brain tissue (Frozen sections) labelling FGF2 with ab8880 at a dilution of 1/500. Tissue sections were fixed with Paraformaldehyde and permeabilized with 0.3 % Troton X-100. The secondary antibody used was Alexa Fluor® 594 conjugated goat polyclonal secondary at 1/400.
ab8880 staining FGF basic in Mouse olfactory epithelium tissue by Immunohistochemistry (Frozen sections). The sections were PFA-fixed prior to blocking with 1% blocking reagent from a tyramide signal amplification kit for 30 minutes at 23°C. The primary antibody was diluted 1/200 in the blocking reagent and incubated with the sample for 2 hours at 23°C. An HRP-conjugated Goat anti-Rabbit polyclonal was used as the secondary antibody, diluted 1/100. After secondary antibody incubation, the signal was amplified using a tyramide signal amplification kit with Alexa Fluor® 488 tyramide.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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