abcam

Product datasheet

Anti-FGF2 antibody [EPR20145-219] - BSA and Azide free ab271983

Recombinant RabMAb

6 Images

Overview

Product name	Anti-FGF2 antibody [EPR20145-219] - BSA and Azide free
Description	Rabbit monoclonal [EPR20145-219] to FGF2 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** Indirect ELISA, Flow Cyt (Intra), IP, ICC/IF, WB
Species reactivity	**Reacts with:** Human, Recombinant fragment
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Recombinant human FGF2 active protein (aa143-288); K562, U-87 MG and SK-OV-3 whole cell lysates; Human fetal kidney, prostate, fetal heart and testis lysates. ICC/IF: U-87 MG and SK-OV-3 cells. Flow Cyt (intra): K562 cells. IP: K562 whole cell lysate.
General notes	ab271983 is the carrier-free version of **ab208687**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. 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**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20145-219
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab271983 in the following tested applications.

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

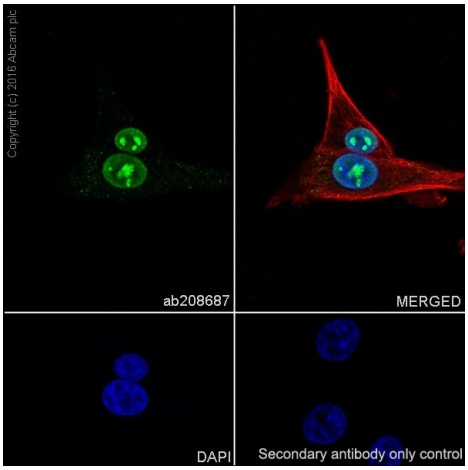
Application	Abreviews	Notes
Indirect ELISA		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 30 kDa.

Target

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



Immunocytochemistry/ Immunofluorescence - Anti-FGF2 antibody [EPR20145-219] (ab271983)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) cells labeling FGF2 with **ab208687** at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

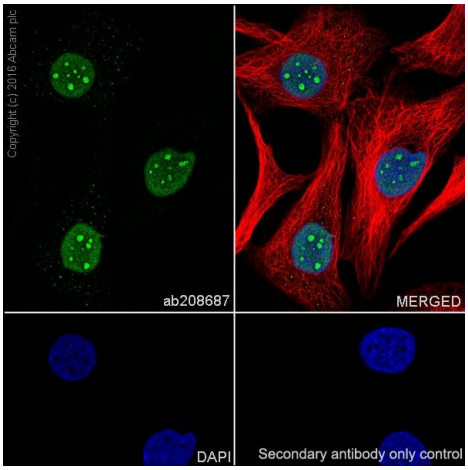
Confocal image showing nuclear and weak cytoplasmic staining on U-87 MG cell line.

The nuclear counterstain is DAPI (blue).

Tubulin is detected with **ab195889** (Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594)) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab208687**).



Immunocytochemistry/ Immunofluorescence - Anti-FGF2 antibody [EPR20145-219] (ab271983)

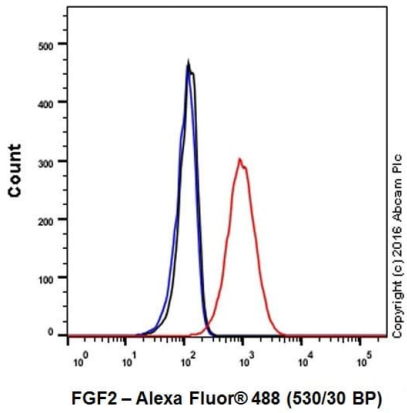
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized SK-OV-3 (Human ovarian cancer cell line) cells labeling FGF2 with **ab208687** at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Confocal image showing nuclear weak cytoplasmic staining on SK-OV-3 cell line.

The nuclear counterstain is DAPI (blue). Tubulin is detected with **ab195889** (Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594)) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution.

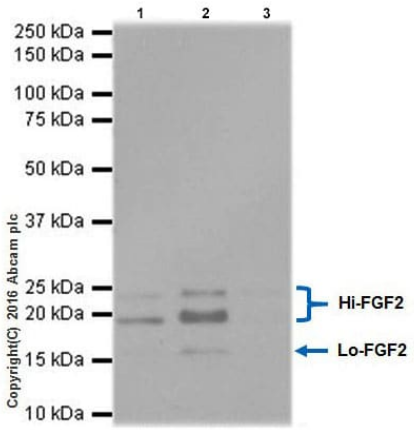
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab208687**).



Flow Cytometry (Intracellular) - Anti-FGF2 antibody [EPR20145-219] - BSA and Azide free (ab271983)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed K562 (Human chronic myelogenous leukemia cell line from bone marrow) cells labeling FGF2 with **ab208687** at 1/600 dilution (red) compared with a rabbit monoclonal IgG isotype control (**ab172730**; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab208687**).



Immunoprecipitation - Anti-FGF2 antibody [EPR20145-219] (ab271983)

FGF2 was immunoprecipitated from 0.35 mg of K562 (Human chronic myelogenous leukemia cell line from bone marrow) whole cell lysate with **ab208687** at 1/30 dilution.

Western blot was performed from the immunoprecipitate using **ab208687** at 1/500 dilution.

VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/1000 dilution.

Lane 1: K562 whole cell lysate 10µg (Input).

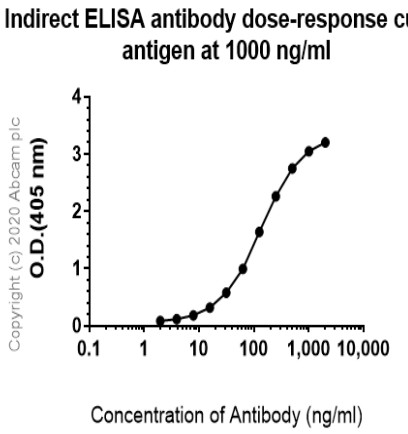
Lane 2: **ab208687** IP in K562 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab208687** in K562 whole cell lysate.

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

Exposure time: 1 second.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab208687**).



Indirect ELISA - Anti-FGF2 antibody [EPR20145-219] - BSA and Azide free (ab271983)

This data was developed using **ab208687**, the same antibody clone in a different buffer formulation.

ELISA analysis of Mouse FGF2 recombinant protein at 1000 ng/ml with **ab208687**. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1/2500 dilution was used as the secondary antibody.

Anti-FGF2 antibody [EPR20145-219] - BSA and Azide free (ab271983)

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