

Anti-FGF2 Picoband Antibody
Catalog # ABO12273

Specification

Anti-FGF2 Picoband Antibody - Product Information

Application	WB
Primary Accession	P09038
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Fibroblast growth factor 2(FGF2) detection. Tested with WB in Human;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-FGF2 Picoband Antibody - Additional Information

Gene ID 2247

Other Names

Fibroblast growth factor 2, FGF-2, Basic fibroblast growth factor, bFGF, Heparin-binding growth factor 2, HBGF-2, FGF2, FGFB

Calculated MW

30770 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Rat

Subcellular 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.

Tissue Specificity

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

Protein Name

Fibroblast growth factor 2

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human FGF2 (219-249aa KEDGRLLASKCVTDECFFFERLESNNYNTYR), different from the related mouse and rat sequences by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the heparin-binding growth factors family.

Anti-FGF2 Picoband Antibody - Protein Information

Name FGF2

Synonyms FGFB

Function

Acts as a ligand for FGFR1, FGFR2, FGFR3 and FGFR4 (PubMed:[8663044](http://www.uniprot.org/citations/8663044)). Also acts as an integrin ligand which is required for FGF2 signaling (PubMed:[28302677](http://www.uniprot.org/citations/28302677)). Binds to integrin ITGAV:ITGB3 (PubMed:[28302677](http://www.uniprot.org/citations/28302677)). Plays an important role in the regulation of cell survival, cell division, cell differentiation and cell migration (PubMed:[28302677](http://www.uniprot.org/citations/28302677), PubMed:[8663044](http://www.uniprot.org/citations/8663044)). Functions as a potent mitogen in vitro (PubMed:[1721615](http://www.uniprot.org/citations/1721615), PubMed:[3732516](http://www.uniprot.org/citations/3732516), PubMed:[3964259](http://www.uniprot.org/citations/3964259)). Can induce angiogenesis (PubMed:[23469107](http://www.uniprot.org/citations/23469107), PubMed:[28302677](http://www.uniprot.org/citations/28302677)). Mediates phosphorylation of ERK1/2 and thereby promotes retinal lens fiber differentiation (PubMed:[29501879](http://www.uniprot.org/citations/29501879)).

Cellular Location

Secreted. Nucleus. Note=Exported from cells by an endoplasmic reticulum (ER)/Golgi-independent mechanism. Unconventional secretion of FGF2 occurs by direct translocation across the plasma membrane (PubMed:20230531). Binding of exogenous FGF2 to FGFR facilitates endocytosis followed by translocation of FGF2 across endosomal membrane into the cytosol (PubMed:22321063). Nuclear import from the cytosol requires the classical nuclear import machinery, involving proteins KPNA1 and KPNB1, as well as CEP57 (PubMed:22321063)

Tissue Location

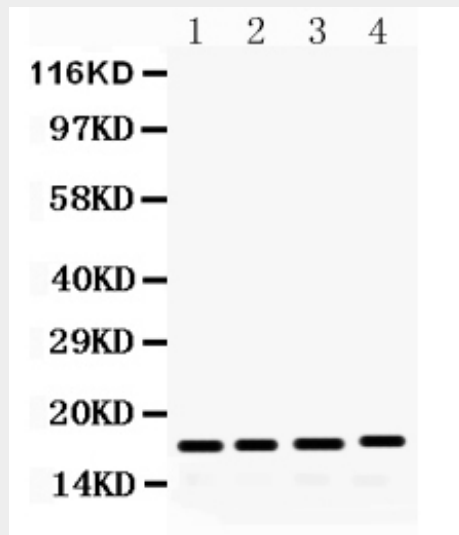
Expressed in granulosa and cumulus cells. Expressed in hepatocellular carcinoma cells, but not in non-cancerous liver tissue.

Anti-FGF2 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-FGF2 Picoband Antibody - Images



Anti- FGF2 Picoband antibody, ABO12273, Western blotting All lanes: Anti FGF2 (ABO12273) at 0.5ug/ml
Lane 1: Human Placenta Tissue Lysate at 50ug
Lane 2: Rat Brain Tissue Lysate at 50ug
Lane 3: Rat Kidney Tissue Lysate at 50ug
Lane 4: Rat Spleen Tissue Lysate at 50ug
Predicted bind size: 17KD
Observed bind size: 17KD

Anti-FGF2 Picoband Antibody - Background

FGF2 has been implicated in a multitude of physiologic and pathologic processes, including limb development, angiogenesis, wound healing, and tumor growth. Human FGF2 shares 96% and 97% amino acid sequence homology with mouse and rat respectively. FGF2 belongs to the fibroblast growth factor (FGF) family. Fibroblast growth factors (FGFs) exhibit widespread mitogenic and neurotrophic activities. Nine members of the family are currently known, and FGF-1 and FGF-2 are present in relatively high levels in CNS. FGF-2 is expressed by at low levels in many tissues and cell types and reaches high concentrations in brain and pituitary.