

Anti-human FGF2 Antibody

Catalog # ABO12691

Specification

Anti-human FGF2 Antibody - Product Information

ApplicationWBPrimary AccessionP09038HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Fibroblast growth factor 2(FGF2) detection. Tested with WB,IHC-P, ELISA in Human.

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

Anti-human FGF2 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

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, By Heat

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

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 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3. Carrier free (No BSA) form



available in stock. If you want this antibody carrier free please specify Carrier Free" or "No BSA" in your order note. "

Immunogen

E.coli-derived human FGF2 recombinant protein(Position: P143-S288).

Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, 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-human FGF2 Antibody - Protein Information

Name FGF2

Synonyms FGFB

Function

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

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non-cancerous liver tissue.

Anti-human FGF2 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-human FGF2 Antibody - Images



Anti- FGF2 antibody, ABO12691, Western blottingAll lanes: Anti FGF2(ABO12691) at 0.5ug/mlLane 1: Recombinant Human FGF2 Protein 10ngLane 2: Recombinant Human FGF2 Protein 5ngLane 3: Recombinant Human FGF2 Protein 2.5ngPredicted bind size: 17KDObserved bind size: 17KD

Anti-human FGF2 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.