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Anti-FGF2 Picoband Antibody

Catalog # ABO12273

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.

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
Application Details	Western blot, 0.1-0.5 □g/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. .
Source	Eukaryota
Protein Name	Fibroblast growth factor 2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
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 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.

Protein Information

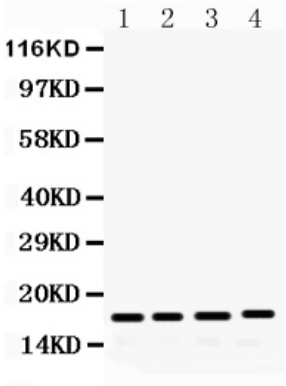
Name	FGF2
Synonyms	FGFB
Function	Acts as a ligand for FGFR1, FGFR2, FGFR3 and FGFR4 (PubMed: 8663044). Also acts as an integrin ligand which is required for FGF2 signaling (PubMed:28302677). Binds to integrin ITGAV:ITGB3 (PubMed:28302677). Plays an important role in the regulation of cell survival, cell 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	Expressed in granulosa and cumulus cells. Expressed in hepatocellular carcinoma cells, but not in non-cancerous liver tissue.

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.

Images

Anti- FGF2 Picoband antibody, ABO12273, Western blottingAll lanes: Anti FGF2 (ABO12273) at 0.5ug/mlLane 1: Human Placenta Tissue Lysate at 50ugLane 2: Rat Brain Tissue Lysate at 50ugLane 3: Rat Kidney Tissue Lysate at 50ugLane 4: Rat Spleen Tissue Lysate at 50ugPredicted bind size: 17KDObserved bind size: 17KD



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