

## Anti-FGFR3 Antibody

Catalog Number: A00200

### About FGFR3

Tyrosine-protein kinase that acts as cell-surface receptor for fibroblast growth factors and plays an essential role in the regulation of cell proliferation, differentiation and apoptosis. Plays an essential role in the regulation of chondrocyte differentiation, proliferation and apoptosis, and is required for normal skeleton development. Regulates both osteogenesis and postnatal bone mineralization by osteoblasts. Promotes apoptosis in chondrocytes, but can also promote cancer cell proliferation. Required for normal development of the inner ear. Phosphorylates PLCG1, CBL and FRS2. Ligand binding leads to the activation of several signaling cascades. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. Phosphorylation of FRS2 triggers recruitment of GRB2, GAB1, PIK3R1 and SOS1, and mediates activation of RAS, MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. Plays a role in the regulation of vitamin D metabolism. Mutations that lead to constitutive kinase activation or impair normal FGFR3 maturation, internalization and degradation lead to aberrant signaling. Over-expressed or constitutively activated FGFR3 promotes activation of PTPN11/SHP2, STAT1, STAT5A and STAT5B. Secreted isoform 3 retains its capacity to bind FGF1 and FGF2 and hence may interfere with FGF signaling.

Jing Chen, Blood, Jul 2005; 106: 328 - 337.

Qing Zhang, Diabetes, Jan 2007; 56: 96 - 106.

Nigel P. Pringle, Development, Jan 2003; 130: 93.

Gladys Valverde-Franco, Hum. Mol. Genet., Feb 2004; 13: 271 - 284.

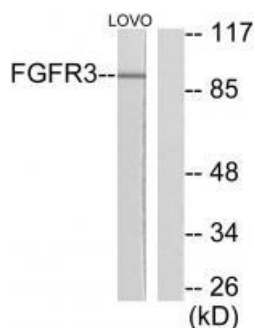
### Overview

Product Name	Anti-FGFR3 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-FGFR3 Antibody (Catalog # A00200). Tested in WB, IHC applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Rabbit IgG in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P22607

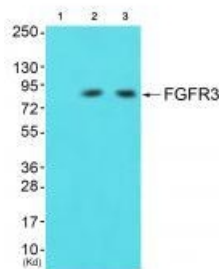
### Technical Details

Immunogen	Synthesized peptide derived from human FGFR3.
Predicted Reactive Species	Canine, Monkey
Cross Reactivity	No cross reactivity with other proteins.
Isotype	IgG
Form	Liquid
Concentration	1 mg/ml
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blotting: 1:500~1:3000</p> <p>Immunohistochemistry: 1:50~1:100</p>

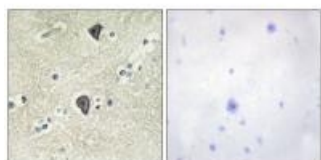
## Anti-FGFR3 Antibody (A00200) Images



Western blot analysis of extracts from LOVO cells, using FGFR3 antibody A00200.



Western blot analysis of extracts from 293 cells (Lane 2) and HepG2 cells (Lane 3), using FGFR3 antibody A00200. The lane on the left is treated with synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using FGFR3 antibody A00200.

## 4 Publications Citing This Product

1. PubMed ID: 10.1097/WNR.0000000000001591, Expression of fibroblast growth factor 9 and its receptors in the dentate gyrus of hippocampus in poststroke depression rats
2. PubMed ID: 10.1016/j.etap.2019.103275, Fluoride regulates the expression of extracellular matrix HSPG and related signaling pathways FGFR3 and Ihh/PTHrP feedback loop during endochondral ossification
3. PubMed ID: 33626078, Nannapaneni S,Griffith CC,Magliocca KR,Chen W,Lyu X,Chen Z,Wang D,Wang X,Shin DM,Chen ZG,Saba NF.Co-expression of fibroblast growth factor receptor 3 with mutant p53, and its association with worse outcome in oropharyngeal squamous cell carcinoma.PLoS One

Visit [bosterbio.com/anti-fgfr3-antibody-a00200-boster.html](https://www.bosterbio.com/anti-fgfr3-antibody-a00200-boster.html) to see all 4 publications.

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