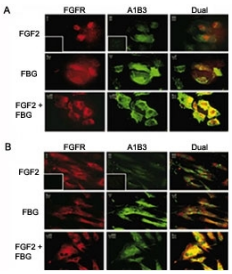
FGFR1 Antibody / Fibroblast growth factor receptor 1 (F50611)

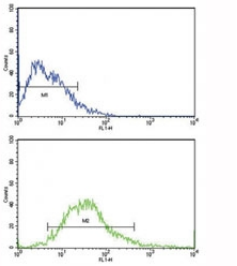
Catalog No.	Formulation	Size
F50611-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F50611-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

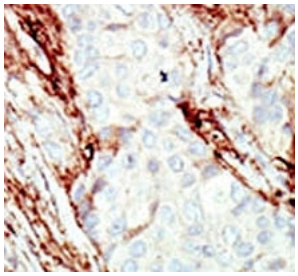
Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	P11362
Applications	Flow Cytometry : 1:10-1:50 Western Blot : 1:1000 IHC (Paraffin) : 1:50-1:100 Immunofluorescence : 1:50-1:100
Limitations	This FGFR1 antibody is available for research use only.



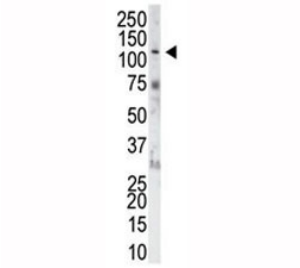
Colocalization of A1B3 and FGFR1 using IF. Treated, confluent ECs (A) or HFFs (B) were stained using 7E3 and FGFR1 antibody. FGFR = red fluorescence (i,iv,vii), A1B3 = green fluorescence (ii,v,viii), and colocalization of FGF2 and fibrinogen receptor = yellow fluorescence (iii,vi,ix).



Flow cytometric analysis of MCF-7 cells using FGFR1 antibody (bottom histogram) compared to a negative control (top histogram). FITC-conjugated goat-anti-rabbit secondary Ab was used for the analysis.



IHC analysis of FFPE human breast carcinoma tissue stained with the FGFR1 antibody



The FGFR1 antibody used in western blot to detect FGFR1 in NIH3T3 cell lysate. Predicted molecular weight: 75-160 kDa depending on glycosylation level.

Description

FGFR1 antibody is a widely used reagent for studying cell signaling, development, and cancer biology. The encoded protein, fibroblast growth factor receptor 1 (FGFR1), is a receptor tyrosine kinase that binds members of the fibroblast growth factor (FGF) family. FGFR1 activation triggers autophosphorylation and initiates downstream signaling cascades including the MAPK, PI3K-Akt, and PLCÃŽÂ³ pathways. These pathways regulate cell proliferation, differentiation, survival, and migration, making FGFR1 a central player in embryogenesis and tissue homeostasis.

Fibroblast growth factor receptor 1 is critical in development, particularly in skeletal formation, neural development, and angiogenesis. Mutations in FGFR1 cause a range of congenital disorders, such as Pfeiffer syndrome and Kallmann syndrome, which involve skeletal abnormalities and reproductive system defects. These conditions highlight the importance of precise FGFR1 signaling for normal growth and development.

In cancer biology, FGFR1 is frequently amplified, overexpressed, or mutated in tumor types including breast cancer, lung squamous cell carcinoma, glioblastoma, and hematological malignancies. Aberrant FGFR1 activity drives uncontrolled proliferation, angiogenesis, and resistance to apoptosis. Because of its oncogenic potential, FGFR1 has become a therapeutic target, with inhibitors and monoclonal antibodies under investigation or in clinical use to block aberrant FGF signaling in cancer patients.

At the molecular level, FGFR1 consists of three extracellular immunoglobulin-like domains that bind FGFs and heparan sulfate proteoglycans, a single transmembrane helix, and an intracellular tyrosine kinase domain. Ligand binding induces receptor dimerization and phosphorylation, creating docking sites for adaptor proteins that propagate signaling. This structural organization enables FGFR1 to integrate diverse extracellular cues into precise cellular responses.

The FGFR1 antibody is widely applied in western blotting, immunohistochemistry, immunofluorescence, and flow cytometry to examine protein expression, activation status, and localization. These applications are valuable in developmental biology, oncology, and therapeutic research. For scientists studying receptor tyrosine kinases, growth

factor signaling, or targeted therapies, the FGFR1 antibody provides a reliable detection tool. NSJ Bioreagents offers validated antibodies designed to ensure reproducibility and accuracy in advanced molecular studies.

Application Notes

Titration of the FGFR1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 19-48 from the human protein was used as the immunogen for this FGFR1 antibody.

Storage

Aliquot the FGFR1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.