

Anti-FGF1 / Acidic FGF Antibody (clone 3A11G5) Mouse Anti Human Monoclonal Antibody Catalog # ALS17459

Specification

Anti-FGF1 / Acidic FGF Antibody (clone 3A11G5) - Product Information

Application Primary Accession Predicted Host Clonality Isotype Calculated MW Dilution WB, IHC-P, E <u>P05230</u> Human Mouse Monoclonal IgG1,k 17460 WB~~1:1000 IHC-P~~N/A E~~N/A

Anti-FGF1 / Acidic FGF Antibody (clone 3A11G5) - Additional Information

Gene ID 2246

Alias Symbol **FGF1** Other Names FGF1, AFGF, Endothelial cell growth factor, Fibroblast growth factor 1, FGFA, ECGFB, HBGF-1, GLIO703, ECGF, ECGF-beta, ECGFA, FGF-1, FGF-alpha, HBGF1

Target/Specificity No cross reactivity with hFGF-6, hFGF-16, hFGF-17, hFGF-18, FGF basic.

Reconstitution & Storage

Lyophilized from PBS, pH 7.4, 0.02% sodium azide. Store lyophilized at -20°C. The reconstituted product can be stored for short term at 4 °C or long term at -20 °C or below. Avoid freeze/thaw cycles.

Precautions Anti-FGF1 / Acidic FGF Antibody (clone 3A11G5) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-FGF1 / Acidic FGF Antibody (clone 3A11G5) - Protein Information

Name FGF1

Synonyms FGFA

Function

Plays an important role in the regulation of cell survival, cell division, angiogenesis, cell differentiation and cell migration. Functions as a potent mitogen in vitro. Acts as a ligand for FGFR1 and integrins. Binds to FGFR1 in the presence of heparin leading to FGFR1 dimerization and



activation via sequential autophosphorylation on tyrosine residues which act as docking sites for interacting proteins, leading to the activation of several signaling cascades. Binds to integrin ITGAV:ITGB3. Its binding to integrin, subsequent ternary complex formation with integrin and FGFR1, and the recruitment of PTPN11 to the complex are essential for FGF1 signaling. Induces the phosphorylation and activation of FGFR1, FRS2, MAPK3/ERK1, MAPK1/ERK2 and AKT1 (PubMed:18441324, PubMed:20422052). Can induce angiogenesis (PubMed:23469107).

Cellular Location

Secreted. Cytoplasm. Cytoplasm, cell cortex. Cytoplasm, cytosol. Nucleus. Note=Lacks a cleavable signal sequence Within the cytoplasm, it is transported to the cell membrane and then secreted by a non-classical pathway that requires Cu(2+) ions and S100A13. Secreted in a complex with SYT1 (By similarity). Binding of exogenous FGF1 to FGFR facilitates endocytosis followed by translocation of FGF1 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 LRRC59

Tissue Location

Predominantly expressed in kidney and brain. Detected at much lower levels in heart and skeletal muscle

Anti-FGF1 / Acidic FGF Antibody (clone 3A11G5) - Protocols

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

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

Anti-FGF1 / Acidic FGF Antibody (clone 3A11G5) - Images