

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse FGF acidic/FGF1 in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant human FGF acidic is observed, and less than 1% cross-reactivity with recombinant mouse (rm) FGF7, rmFGF21, and rmFGF23
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse FGF acidic/FGF1 Phe16-Asp155 Accession # NP_034327
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Neutralization	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

FGF acidic, also known as FGF1, ECGF, and HBGF-1, is a 17 kDa nonglycosylated member of the FGF family of mitogenic peptides. FGF acidic, which is produced by multiple cell types, stimulates the proliferation of all cells of mesodermal origin and many cells of neuroectodermal, ectodermal, and endodermal origin. It plays a number of roles in development, regeneration, and angiogenesis (1-3). Mouse FGF acidic shares 52% amino acid (aa) sequence identity with FGF basic and 15%-35% with other mouse FGFs. It shares 91%, 96%, 94%, and 100% aa sequence identity with bovine, human, porcine, and rat FGF acidic, respectively, and exhibits considerable species crossreactivity. During its nonclassical secretion, FGF acidic associates with S100A13, copper ions, and the C2A domain of synaptotagmin 1 (4). The secreted FGF acidic is stored in complex with extracellular heparan sulfate (5). The ability of heparan sulfate to bind FGF acidic is determined by its pattern of sulfation, and alterations in this pattern during embryogenesis thereby regulating FGF acidic bioactivity (6). The association of FGF acidic with heparan sulfate is a prerequisite for its subsequent interaction with FGF receptors (7, 8). Ligation triggers receptor dimerization, transphosphorylation, and internalization of receptor/FGF complexes (9). Internalized FGF acidic can translocate to the cytosol with the assistance of Hsp90 and then migrate to the nucleus by means of its two nuclear localization signals (10-12). The phosphorylation of FGF acidic by nuclear PKC delta triggers its active export to the cytosol where it is dephosphorylated and degraded (13, 14). Intracellular FGF acidic functions as a survival factor by inhibiting p53 activity and proapoptotic signaling (15).

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