Human FGF basic/FGF2/bFGF Alexa Fluor® 405-conjugated Antibody

Monoclonal Rat IgG_{2A} Clone # 954824

Catalog Number: FAB2332V

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects Human FGF basic/FGF2/bFGF in direct ELISA.
Source	Monoclonal Rat IgG_{2A} Clone # 954824
Purification	Protein A or G purified from cell culture supernatant
Immunogen	*E. coli*-derived human FGF basic/FGF2/bFGF Pro143-Ser288 Accession # P09038
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.*

Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	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 basic (also known as FGF-2 and HBGF-2) is a member of the FGF superfamily of mitogenic proteins which show 35-60% amino acid conservation. FGF acidic and basic are unique from other members of the family in that they lack classical secretory signal peptides. However, they are both readily secreted from cells by an alternative secretory pathway involving direct translocation and aided by several chaperones. FGF acidic (FGF-1) and FGF basic (FGF-2) were the first two identified FGFs, and the designations acidic and basic refer to their relative isoelectric points. The full length human FGF basic protein is 288 amino acids, but there are multiple start sites which produce various shorter forms. Further adding to the complexity, a variety of forms of FGF basic are produced as a result of N-terminal extensions. These extensions affect localization of FGF basic in cellular compartments but do not affect biological activity. FGF basic has been isolated from a number of sources, including neural tissue, adrenal cortex, pituitary gland, corpus luteum, and placenta. Binding of FGF to heparin or cell surface heparan sulfate proteoglycans is required for FGF binding with high affinity to FGF receptors. FGF basic stimulates proliferation of all cells of mesodermal origin as well as many cells of neuroectodermal, ectodermal, and endodermal origin. FGF basic also induces neuronal differentiation, survival, and regeneration, and modulates embryonic development and differentiation. These observed in vitro functions suggest FGF basic may play a role *in vivo* in the modulation of such normal processes as angiogenesis, wound healing and tissue repair, embryonic development and differentiation, and neuronal function and neural degeneration. Additionally, FGF basic may also participate in the development of several pathological conditions resulting from excessive cell proliferation and/or angiogenesis.

PRODUCT SPECIFIC NOTICES

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Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475