Mouse FGF-10 Alexa Fluor® 594-conjugated Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF6224T
100 µg

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse and human FGF-10 in Western blots. In direct ELISAs, approximately 100% cross-reactivity with recombinant rat FGF-10 is observed and less than 10% cross-reactivity with recombinant mouse FGF-6 and recombinant mouse F
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant mouse FGF-10 Ser62-Thr209 Accession # NP_032028
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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.*

Western Blot	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

The Fibroblast Growth Factors (FGFs) are heparin binding glycoproteins that exert a variety of biological activities toward cells of mesenchymal, neuronal, and epithelial origin. FGF-10 belongs to the subgroup of FGFs that also includes FGF-3, -7, and -22 (1). Mature mouse FGF-10 is an approximately 20 kDa protein that contains a serine-rich region near its N-terminus (2, 3). C-terminal to this region (aa 62-209), it shares 94% and 100% amino acid sequence identity with human and rat FGF-10, respectively. FGF-10 is secreted by mesenchymal cells and associates with extracellular FGF-BP (1, 4). It preferentially binds and activates epithelial cell FGF R2 (IIIb) and interacts more weakly with FGF R1 (IIIb) (5). The mitogenic and chemotactic properties of FGF-10 are critical in many tissues during embryogenesis. This includes limb bud initiation (6), palate development (7), branching morphogenesis and directional outgrowth of lung buds (2, 8), formation of the otic vesicle and chochlea (9), adipogenesis (10), and the development of prostate, mammary, lacrimal, and submandibular salivary glands (11-14). FGF R2 (IIIb) signaling in these responsive tissues is similarly important during embryogenesis (7, 9, 12-14). The expression and function of FGF-10 are negatively regulated by Shh and BMP-4 in the developing lung (2, 8). Overlapping expression patterns and activities with FGF-3, -7, and -8 suggest at least a partial redundancy in FGF-10 biology (7, 9, 13, 14). FGF-10 induced signaling through FGF R2 (IIIb) also contributes to the progression of pancreatic cancer (15).

PRODUCT SPECIFIC NOTICES

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