

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human FGF-6 in direct ELISAs and Western blots. In Western blots, approximately 50% cross-reactivity with recombinant human (rh) FGF-4 is observed, less than 5% cross-reactivity with rhFGF-9 is observed, and less than 2% cross-reactivity                       |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human FGF-6<br>Gly41-Ile208<br>Accession # P10767                                                                                                                                                                                       |
| <b>Conjugate</b>          | Alexa Fluor 700<br>Excitation Wavelength: 675-700 nm<br>Emission Wavelength: 723 nm                                                                                                                                                                                         |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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.

|                       |                                                                        |
|-----------------------|------------------------------------------------------------------------|
| <b>Neutralization</b> | Optimal dilution of this antibody should be experimentally determined. |
| <b>Western Blot</b>   | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

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

## BACKGROUND

Fibroblast Growth Factor-6 (FGF-6), also known as HST-2, is a 25-28 kDa member of the FGF family of heparin binding polypeptides which are potent regulators of cell proliferation, differentiation, and function. FGF proteins contain a 120 amino acid (aa) core FGF domain that exhibits a  $\beta$ -trefoil structure (1, 2). Mature human FGF-6 is a 171 aa protein that shares 94% aa sequence identity with mouse and rat FGF-6 (3). It binds and signals primarily through FGF R1c, 2c, and 4 (4). FGF-6 functions as a mitogen for fibroblasts, vascular endothelial cells, and prostate carcinoma cells, and N-linked glycosylation is required for the full mitogenic effect (5-7). FGF-6 expression is restricted to skeletal muscle during development although it can be upregulated in prostate cancer and Kaposi sarcoma (7-9). In the adult, FGF-6 is upregulated in injured skeletal muscle and is required for muscle regeneration (10). FGF-6 inhibits the terminal differentiation of myoblasts and also cooperates with TGF- $\beta$ 2 to promote chondrogenesis in embryonic somites (8, 11).

## PRODUCT SPECIFIC NOTICES

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