

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse FGF-6 in direct ELISAs. In direct ELISAs, approximately 15% cross-reactivity with recombinant human FGF-6 and less than 1 % cross-reactivity with recombinant mouse FGF-7 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse FGF-6 Pro39-Ile208 Accession # NP_034334
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Immunohistochemistry	5-15 µg/mL	Immersion fixed frozen sections of mouse embryo

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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 β-trefoil structure (1, 2). Mature mouse FGF-6 is a 171 aa protein that shares 94% and 99% aa sequence identity with human and rat FGF-6, respectively (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-β2 to promote chondrogenesis in embryonic somites (8, 11).

References:

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