

DESCRIPTION

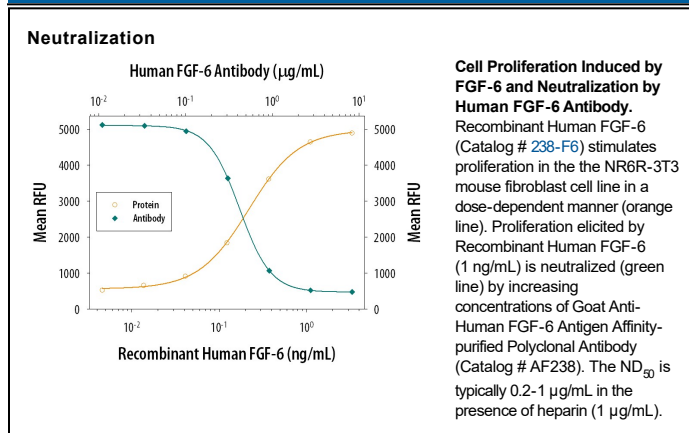
Species Reactivity	Human
Specificity	Detects human FGF-6 in direct ELISAs and Western blots. In Western blots, approximately 50% cross-reactivity with recombinant human (rh) FGF-4 is observed, less than 5% cross-reactivity with rhFGF-9 is observed, and less than 2% cross-reactivity with FGF-acidic, rhFGF-5, and rhFGF-7 is observed. In direct ELISAs, less than 1% cross-reactivity with rhβ-ECGF, recombinant mouse (rm) FGF-8b, and rmFGF-8c is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human FGF-6 Gly41-Ile208 Accession # P10767
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
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
Western Blot	0.1 µg/mL	Recombinant Human FGF-6 (Catalog # 238-F6)
Neutralization	Measured by its ability to neutralize FGF-6-induced proliferation in the NR6R-3T3 mouse fibroblast cell line. Rizzino, A. <i>et al.</i> (1988) Cancer Res. 48 :4266. The Neutralization Dose (ND ₅₀) is typically 0.2-1 µg/mL in the presence of 1 ng/mL Recombinant Human FGF-6 and 1 µg/mL heparin.	

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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 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- β 2 to promote chondrogenesis in embryonic somites (8, 11).

References:

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