

# FGF-23 (M-251): sc-50291

## BACKGROUND

Fibroblast growth factor-1 (FGF-1), also designated acidic FGF, and fibroblast growth factor-2 (FGF-2), also designated basic FGF, are members of a family of growth factors that stimulate proliferation of cells of mesenchymal, epithelial and neuroectodermal origin. Additional members of the FGF family include the oncogenes FGF-3 (Int2) and FGF-4 (hst/Kaposi), FGF-5, FGF-6, FGF-7 (KGF), FGF-8 (AIGF), FGF-9 (GAF) and FGF-10 through FGF-23. Members of the FGF family share 30-55% amino acid sequence identity and similar gene structure, and are capable of transforming cultured cells when overexpressed in trans-fected cells. Cellular receptors for FGFs are members of a second multigene family, including four tyrosine kinases designated Flg (FGFR-1), Bek (FGFR-L), TKF and FGFR-3.

## REFERENCES

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4. Yamashita, T., et al. 2002. Fibroblast growth factor (FGF)-23 inhibits renal phosphate reabsorption by activation of the mitogen-activated protein kinase pathway. *J. Biol. Chem.* 277: 28265-28270.
5. Riminucci, M., et al. 2003. FGF-23 in fibrous dysplasia of bone and its relationship to renal phosphate wasting. *J. Clin. Invest.* 112: 683-692.
6. Gupta, A., et al. 2004. FGF-23 is elevated by chronic hyperphosphatemia. *J. Clin. Endocrinol. Metab.* 89: 4489-4492.
7. Shimada, T., et al. 2004. FGF-23 is a potent regulator of vitamin D metabolism and phosphate homeostasis. *J. Bone Miner. Res.* 19: 429-435.
8. Saito, H., et al. 2005. Circulating FGF-23 is regulated by 1 $\alpha$ ,25-dihydroxy-vitamin D3 and phosphorus *in vivo*. *J. Biol. Chem.* 280: 2543-2549.

## CHROMOSOMAL LOCATION

Genetic locus: *Fgf23* (mouse) mapping to 6 F3.

## SOURCE

FGF-23 (M-251) is a rabbit polyclonal antibody raised against amino acids 1-251 representing full length FGF-23 of mouse origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

FGF-23 (M-251) is recommended for detection of precursor and mature FGF-23 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for FGF-23 siRNA (m): sc-39487, FGF-23 shRNA Plasmid (m): sc-39487-SH and FGF-23 shRNA (m) Lentiviral Particles: sc-39487-V.

Molecular Weight of mature FGF-23: 32 kDa.

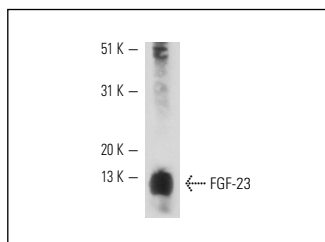
Molecular Weight of FGF-23 fragment(s): 12 kDa.

Positive Controls: mouse heart extract: sc-2254.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## DATA



FGF-23 (M-251): sc-50291. Western blot analysis of FGF-23 expression in mouse heart tissue extract.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.



Try **FGF-2 (G-2): sc-365106** or **FGF-2 (C-2): sc-74412**, our highly recommended monoclonal alternatives to FGF-23 (M-251). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **FGF-2 (G-2): sc-365106**.