



Anti-Human FGF-16

20150223ML



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	102-P125G
Size:	100 µg
Lot. No.:	According to product label

Preparation: Produced from sera of goats pre-immunized with highly pure (>98%) recombinant human FGF-16 (human Fibroblast Growth Factor-16). Anti-human FGF-16 specific antibody was purified by affinity chromatography employing immobilized human FGF-16 matrix.

Target Background

Synonyms (Target):	FGF16; FGF-16
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Fibroblast growth factor 16 (FGF16) belongs to the large FGF family which has at least 23 members. All FGF family members are heparinbinding growth factors with a core 120 amino acid (aa) FGF domain that allows for a common tertiary structure. FGFs are expressed during embryonic development and in restricted adult tissues. They act on cells of mesodermal and neuroectodermal origin to regulate diverse physiologic functions including angiogenesis, cell growth, pattern formation, embryonic development, metabolic regulation, cell migration, neurotrophic effects and tissue repair. Signaling receptors for FGFs are type I transmembrane receptor tyrosine kinases belonging to the immunoglobulin (Ig) superfamily. Four distinct but related classes of FGF receptors, FGF R1, 2, 3, and 4, exist. Through alternative splicing, multiple isoforms for FGF R1, 2 and 3, with distinct ligand recognition profiles, are also generated. Human FGF16 cDNA predicts a 207 aa precursor protein with one N-linked glycosylation site. FGF16 lacks a typical signal peptide but is efficiently generated by mechanisms other than the classical protein secretion pathway. Among FGF family members, FGF16 is most similar to FGF9, sharing 73% aa sequence homology. Human FGF16 shares 99% and 98.6% aa sequence identity with the mouse and rat FGF16, respectively. In rat embryos, FGF16 message is expressed predominantly in brown adipocytes. In adult animals, it is localized primarily in heart tissue. FGF16 binds to and activates FGF receptor 4.

Database References Target

Protein RefSeq:	NP_003859
Uniprot ID:	O43320
mRNA RefSeq:	NM_003868

Product Specifications

Species reactivity	Human
Clone/Ab feature	Goat IgG
Cross reactivity	Human
Host	Goat
Clonality	Polyclonal Antibody
Purification	Antigen-affinity purified
Immunogen	Recombinant human FGF-16
Formulation	lyophilized from PBS
Reconstitution buffer	water

Reconstitution: Reconstitute the antibody in sterile water to a concentration of 0.1 - 1.0 mg/ml.

Stability: The lyophilized antibody is stable for at least 2 years from date of receipt at -20°C. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

Western Blot: To detect human FGF-16 by Western Blot analysis this antibody can be used at a concentration of 0.1 - 0.2 µg/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant human FGF-16 is 1.5 - 3.0 ng/lane, under either reducing or non-reducing conditions.

ELISA: Indirect: To detect human FGF-16 by indirect ELISA (using 100 µl/well antibody solution) a concentration of 0.5 - 2.0 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with compatible secondary reagents, allows the detection of at least 0.2 - 0.4 ng/well of recombinant human FGF-16.

Sandwich: To detect human FGF-16 by sandwich ELISA (using 100 µl/well antibody solution) a concentration of 0.5 - 2.0 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with compatible secondary reagents, allows the detection of at least 0.2 - 0.4 ng/well of recombinant human FGF-16.

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!