

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human FGF-19 in direct ELISAs and Western blots. Shows approximately 10% cross-reactivity with recombinant human (rh) FGF-3 and rhFGF-5 and no cross-reactivity with rhFGF-4, rhFGF-6, rhFGF-7, rhFGF-9, rhFGF-10, rhFGF-13, rhFGF-16, r
Source	Monoclonal Mouse IgG ₁ Clone # 117611
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human FGF-19 Phe27-Lys216 Accession # O95750
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.

ELISA Capture (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
ELISA Detection (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Blockade of Receptor-ligand Interaction	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

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

BACKGROUND

Fibroblast growth factor 19 (FGF-19) belongs to the large FGF family which has at least 23 members (1, 2). All FGF family members are heparin-binding 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 (3, 4). Signaling receptors for FGFs are type I transmembrane receptor tyrosine kinases belonging to the 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 (4). Human FGF-19 cDNA predicts a 251 aa precursor protein with a 22 aa signal peptide and a 229 aa secreted mature protein with no potential N-linked glycosylation sites (1, 2). Among FGF family members, human FGF-19 is most closely related to chicken FGF-19 and murine FGF-15, sharing approximately 61% and 51% aa sequence identity, respectively (1, 2, 5). Neither the human orthologue of mouse FGF-15, nor the mouse counterpart of human FGF-19 has been identified. With the exception of adult gall bladder epithelium, FGF-19 expression is restricted to fetal tissues (1, 2). Unlike most FGFs which bind to and activate more than one FGF receptor, FGF-19 is a specific ligand for FGF R4 (2). Similarly, another FGF family member, FGF-7 (KGF), only activates KGF R, the IIb isoform of FGF R2 (4). During chick embryogenesis, FGF-19 has been shown to act synergistically with Wnt-8c to initiate inner ear development (5).

PRODUCT SPECIFIC NOTICES

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