Human/Primate GDF-15 Alexa Fluor® 405-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 147627

Catalog Number: FAB957V

100 µg

DESCRIPTION

Species Reactivity	Human/Primate
Specificity	Detects human GDF-15 in ELISAs and Western blots. In ELISAs, no cross-reactivity with recombinant human GDF-11, recombinant mouse (rm) GDF-5, rmGDF-6, rmGDF-7, or rmGDF-8 is observed.
Source	Monoclonal Mouse IgG_{2B} Clone # 147627
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human GDF-15 Ala197-Ile308 Accession # Q99988
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.

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

Growth Differentiation Factor 15 (GDF-15), also called Macrophage inhibitory cytokine-1 (MIC-1), placental transforming growth factor-β, prostate-derived factor, and placental bone morphogenetic protein, is a divergent member of the transforming growth factor β(TGF-β) superfamily. GDF-15 is highly expressed in placenta and is expressed at lower levels in kidney, pancreas, prostate and colon. It is also widely expressed in brain. Similarly to other TGF-β family proteins, GDF-15 is synthesized as a large precursor protein that is cleaved at the dibasic cleavage site (RXXR) to release the carboxy-terminal domain. The carboxy-terminal domain of GDF-15 contains the characteristic seven conserved cysteine residues necessary for the formation of the cysteine knot and the single interchain disulfide bond. Furthermore, the carboxy-terminal domain contains two additional cysteine residues that form a fourth intrachain disulfide bond. Biologically active GDF-15 is a disulfide-linked homodimer of the carboxy-terminal 112 amino acid residues. Mature human GDF-15 shares 66.1% and 68.7% amino acid sequence similarity with rat and mouse GDF-15, respectively, which are remarkably low homologies between species in TGF-β superfamily. GDF-15 has been shown to have various functions, including inhibition of production of tumor necrosis factor α (TNF-α) from lipopolysaccharide-stimulated macrophages, induction of cartilage formation, early-stage endochonadal bone formation, and promotion of neuronal survival.

PRODUCT SPECIFIC NOTICES

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