

# GDF-15 (ME-6D10): sc-101379

## BACKGROUND

Growth differentiation factor 15 (GDF-15), also known as PDF, MIC-1, PLAB, NAG-1 or TGF- $\beta$ , is a member of the transforming growth factor  $\beta$  (TGF- $\beta$ ) superfamily. Synthesized intracellularly, the protein is secreted as a dimer linked by disulfide bonds. Epithelial cells and macrophages are the sites of strongest GDF-15 expression, although it is widely expressed in adult tissue. In the brain, GDF-15 expression occurs in the choroid plexus, from which the protein is secreted into the cerebrospinal fluid. The gene for GDF-15 is responsive to p53 tumor suppressor protein, and in cultured cerebellar granule neurons GDF-15 can prevent cell death by the activation of Akt and inhibition of ERK. GDF-15 acts as a trophic factor for certain classes of neurons, promoting cell survival and differentiation. Overexpression of GDF-15 occurs in prostate cancer, and may be a means of diagnosis. In the uterus, GDF-15 may work to suppress maternally derived proinflammatory cytokines, thereby promoting fetal survival.

## REFERENCES

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4. Moore, A.G., et al. 2000. The transforming growth factor  $\beta$  superfamily cytokine macrophage inhibitory cytokine-1 is present in high concentrations in the serum of pregnant women. *J. Clin. Endocrinol. Metab.* 85: 4781-4788.
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## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## CHROMOSOMAL LOCATION

Genetic locus: GDF15 (human) mapping to 19p13.11.

## SOURCE

GDF-15 (ME-6D10) is a mouse monoclonal antibody genetically immunized with cDNA encoding amino acids 30-194 of GDF-15 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

GDF-15 (ME-6D10) is available conjugated to either phycoerythrin (sc-101379 PE) or fluorescein (sc-101379 FITC), 200  $\mu$ g/ml, for IF, IHC(P) and FCM.

## APPLICATIONS

GDF-15 (ME-6D10) is recommended for detection of GDF-15 of human origin by flow cytometry (1  $\mu$ g per 1 x 10<sup>6</sup> cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for GDF-15 siRNA (h): sc-39798, GDF-15 shRNA Plasmid (h): sc-39798-SH and GDF-15 shRNA (h) Lentiviral Particles: sc-39798-V.

Molecular Weight of GDF-15 precursor: 40 kDa.

Molecular Weight of mature GDF-15: 30 kDa.

## RESEARCH USE

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