Human GDF15

Origin:	Recombinant	**Cat. No.:**	41980
Tag:	N-terminal 6xHis	**Size:**	20㎍
Source:	*E.coli*	**Purity:**	>90%
Other names:	MIC-1, PDF	**Species:**	Human

Description

Expressed in HEK293 cells with total 155 AA. Mw: 17.2 KDa (calculated). N-terminal 6xHis-tag, EK recognition site and TEV cleavage site, 43 extra AA (highlighted).
Recombinant antigen for research use or manufacturing only.

Introduction to the Molecule

GDF-15 plays an important role in tumorigenesis and metastasis. It has been observed that in many types of cancers, such as colorectal, breast, and prostate, the expression of GDF-15 is dramatically increased. Additionally, in cancer patients, serum levels of GDF-15 are elevated, which are of value in disease diagnosis and stratification. GDF-15 is strongly induced by the tumor suppressor gene p53 and other anti-tumorigenic agents, such as the non-steroidal anti-inflammatory drugs and peroxisome proliferators activated receptor γ. These findings suggest that GDF-15 may be a downstream target of those signaling pathways that regulate cell cycle arrest and apoptosis. Through the modulation of neuronal pathways important in the regulation of appetite and energy homeostasis, GDF-15 mediates cancer-induced anorexia and weight loss.

Amino Acid Sequence

MRGSHHHHHHGMASMTGGQQMGRDLYDDDDKDRWGSENLYFQGARNGDHCPLGP
GRCCRLHTVRASLEDLGWADWVLSPREVQVTMCIGACPSQFRAANMHAQIKTSLHRLKPDTVP
APCCVPASYNPMVLIQKTDTGVSLQTYDDLLAKDCHCI

Applications

Functional study, standard ELISA test, Western Blot.

Formulation

Stored in 50mM NaH_2PO_4, 20% glycerol, pH 7.4 at 0.1mg/ml.

Storage

Store at –80°C. Avoid repeated freezing /thawing cycles.

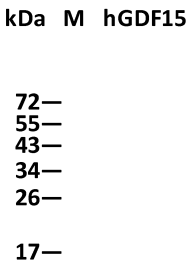
Quality Control Test

BCA to determine quantity of the protein.
SDS PAGE to determine purity of the protein.
LAL to determine endotoxin level.

Bioactivity Test

Recombinant hGDF15 is able to activate ERK phosphorylation in HEK293 cells co-transfected with GFRAL and RET51, which are receptor and co-receptor of GDF15.

SDS-PAGE gel



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