41980. Human Growth/Differentiation Factor 15 (GDF-15)

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

Introduction

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.

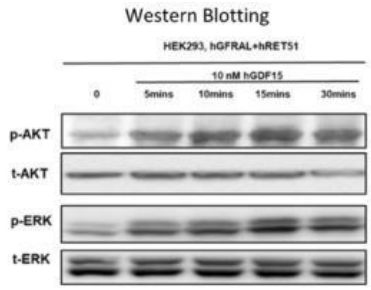
Description

Expressed in E.coli cells with total 155 AA. Mw: 17.2 KDa (calculated).
N-terminal 6xHis-tag, EK recognition site and TEV cleavage site, 44 extra AA (highlighted).
Recombinant antigen for research use or manufacturing only.

Amino Acid Sequence

MRGSHHHHHHGMASMTGGQQMGRDLYDDDDKDRWGSENLYFQGARNGDHCPLGPGRCCRLH TVRASLEDLGWADWVLSPREVQVTMCIGACPSQFRAANMHAQIKTSLHRLKPDTVPAPCCVPASYNP MVLIQKTDTG VSLQTYDDLLAKDCHCI

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.

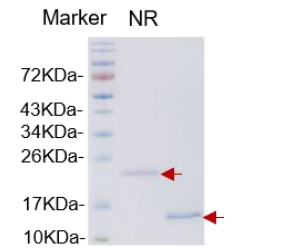
Bioactivity Test

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.

Quality Control Test

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

SDS-PAGE gel



NR: Non-reduced; R: Reduced

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