

TECHNICAL DATA SHEET

Recombinant Human Adipolean (gAcrp30) Variant (Carrier-free)

Catalog Number: 21-7163

RPx-Pro™ Recombinant Protein PRODUCT INFORMATION

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Recombinant Human Adipolean (gAcrp30) Variant (Carrier-free)

DESCRIPTION

Adipolean, also known as gAcrp30 or globular adiponectin, is a globular protein proteolytically cleaved from adiponectin. It is expressed exclusively by differentiated adipocytes and is present in circulating plasma. Adipolean/gAcrp30 enhances fatty acid oxidation in muscle which may lead to weight loss. Low plasma levels of this protein are associated with insulin resistance and obesity. gAcrp30 and Adiponectin signal through the AdipoR1 and AdipoR2 receptors.

MOLECULAR MASS

Recombinant Human Adipolean (gAcrp30) Variant contains an additional 14 N-terminal amino acids and has a molecular weight of 18.1 kDa. This 159 amino acid protein is a naturally occurring variant.

AMINO ACID SEQUENCE

PGAEGPRGFP GIQGRKGEPEG EGAYVYRSFAF SVGLETYVTI PNMPIRFTKI FYNQQNHYDG STGKFHCNIP GLYYFAYHIT VYMKDVKVSL FKKDKAMLFT YDQYQENNVD QASGSVLLHL EVGDQVWLQV YGEGERNGLY ADNDNDSTFT GFLLYHDTN

SOURCE

E. coli

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-20°C

PROTEIN CONTENT

Verified by UV Spectroscopy and/or SDS-PAGE gel.

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/µg of protein (<1 EU/µg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

Mouse, Rat

BIOACTIVITY

The expected ED₅₀ is 1.0-3.0 µg/ml, as determined by a cytotoxicity assay using murine M1 cells.

RESEARCH AREAS

Diabetes

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Fruebis J, Tsao TS, Javorschi S, Ebbets-Reed D, Erickson MR, Yen FT, Bihain BE and Lodish HF. 2001. Proc Natl Acad Sci U S A. 98(4): 2005-2010.
Tomas E, Tsao TS, Saha AK, Murrey HE, Zhang Cc, Itani SI, Lodish HF and Ruderman NB. 2002. Proc Natl Acad Sci U S A. 99(25): 16309-16313. Pajvani UB, Du X, Combs TP, Berg AH, Rajala MW, Schultness T, Engel J, Brownlee M and Scherer PE. 2003. J Biol Chem. 278(11): 9073-9085.

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