TECHNICAL DATA SHEET

Recombinant Mouse Adiponectin (Acrp30) (Carrier-free)

Catalog Number: 21-7166

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

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Recombinant Mouse Adiponectin (Acrp30) (Carrier-free)

DESCRIPTION

Adiponectin, or Acrp30, is a secreted hormone protein (adipokine) that is expressed exclusively by adipocytes and is present in circulating plasma. Low plasma levels of this protein are associated with insulin resistance and obesity. Adiponectin signals through the AdipoR1 and AdipoR2 receptors, and its interaction with various growth factors may, in part, account for a role in the regulation of cell growth and tissue remodeling. This protein had been shown to exhibit both pro- and anti-inflammatory effects.

MOLECULAR MASS

Recombinant Mouse Adiponectin, a glycosylated multimer, has a calculated molecular weight of 25.8 kDa. It contains amino acids Val-21 to Asn-247 of the precursor protein fused to an N-termina histidine tag. Under reducing conditions, the glycosylated monomer migrates at about 35 kDa by SDS PAGE.

AMINO ACID SEQUENCE

RGHHHHHHHH VTTTEELAPA LVPPPKGTCA GWMAGIPGHP GHNGTPGRDG RDGTPGEKGE KGDAGLLGPK GETGDVGMTG AEGPRGFPGT PGRKGEPGEA AYVYRSAFSV GLETRVTVPN VPIRFTKIFY NQQNHYDGST GKFYCNIPGL YYFSYHITVY MKDVKVSLFK KDKAVLFTYD QYQEKNVDQA SGSVLLHLEV GDQVWLQVYG DGDHNGLYAD NVNDSTFTGF LLYHDTN

SOURCE	APPLICATIONS	PURITY	STORAGE
Hi-5 Insect cells	Bioassay	95 %	-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

BIOACTIVITY

The expected ED_{50} is 4.0-6.0 µg/ml, as determined by a cytotoxicity assay using murine M1 cells.

RESEARCH AREAS

Diabetes, Inflammation

RECONSTITUTION

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

REFERENCES

Nedvídková J, Smitka K, Kopský V and Hainer V. 2005. Physiol Res. 54(2): 133-140. Díez JJ and Iglesias P. 2003. Eur J Endocrinol. 148(3): 293-300. Wang Y, Lam KS, Xu JY, Lu G, Xu LY, Cooper GJ and Xu A. 2005. J Biol Chem. 280(18): 18341-18347. Yamauchi T, Nio Y, Maki T, Kobayashi M, Takazawa T, Iwabu M, Okada-Iwabu M, Kawamoto S, Kubota N, Kubota T, Ito Y, Kamon J et al. 2007. Nat Med. 13(3): 332-339.