

BACKGROUND

Globular ACRP30, gACRP30, is a naturally occurring cleavage product of Adiponectin, a molecule made exclusively by adipocytes. gACRP-30 is detected at relatively high concentrations in the serum and is thought to play an important role in hyperglycemia and insulin resistance. gACRP30 signals through receptors, AdipoR1 and AdipoR2.

Recombinant human gACRP30 is a non-glycosylated protein, consisting of 145 amino acids with a molecular weight of 16.7 kDa.

Alternative Names:

Adipolean, apm-1

Amino Acid Sequence:

MKGEPGEGAY VYRSAFSVGL ETYVTIPNMP IRFTKIFYNQ
QNHYDGGSTGK FHCNIPGLYY FAYHITVYMK DVKVSFLKKD
KAMLFYDQY QENNVDQASG SVLLHLEVD QVWLQVYGE
ERNGLYADND NDSTFTGFL YHDTN

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant human gACRP30 is lyophilized from 10 mM Tris, pH 8.0 + 0.75 mM DTT at a concentration of 1 mg/ml.

Stability:

Lyophilized human gACRP30 should be stored desiccated below -18°C. Upon reconstitution the product should be aliquoted and stored at below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile 5 mM Tris, pH 8.0 + 0.75 mM DTT at 0.1mg/ml, which can then be further diluted to other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The activity is determined by the ability to inhibit the proliferation of mouse M1 cells. The expected ED50 for this effect is 1.0 – 2.5 ug/ml.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

