one isolated polypeptide comprising an amino acid sequence denoted by any one of SEQ. ID. NO. 1, SEQ. ID. NO. 5 or SEQ. ID. NO. 9, or any fragments, derivatives or analogs thereof, a nucleic acid sequence encoding the same, any combinations or mixtures thereof or any composition comprising the same.

These and other aspects of the invention will become apparent by the hand of the proceeding drawings.

BRIEF DESCRIPTION OF THE FIGURES

FIGURE 1

The APC-2 peptide effects on glucose tolerance

Mouse blood glucose levels in mice treated as described with vehicle (◆~~pink~~), 0.25mg/Kg (●~~dark blue line~~), 1.5 mg/Kg (▲~~yellow line~~), or 15 mg/Kg (■~~light blue line~~) APC-2, after administration of intraperitoneal (2 g/Kg body weight) glucose injection are shown.

SD of all points was lower than 12%.

FIGURE 2

The APC-2peptide effects on plasma glucagon levels

Mouse blood glucagon levels in mice treated as described with indicated APC-2 dosages are shown.

SD of all points was lower than 12%.

FIGURE 3A-3C

The APC-2 peptide increases Insulin Receptor and GLUT-4 expression in splenocytes

Northern blot analysis of HPRT, insulin receptor and GLUT-4 in mice treated as described with indicated APC-2 dosages (C [control]; 5 [0.25 mg/Kg body weight]; 30 [1.5 mg/Kg body weight]; 300 [15 mg/Kg body weight]) are shown.

FIG. 3A: HPRT Northern blot analysis.

FIG. 3B: Insulin receptor Northern blot analysis.

FIG. 3C: GLUT-4 Northern blot analysis.