Urocortins for improved insulin secretion and β-cell survival of pancreatic islet cells

The Urocortins (Ucn) are neuropeptides that belong to the corticotropin-releasing factor family and are ligands for CRF type 1 and 2 receptors. Their role in the stress response has been well characterized and Ucn2 and Ucn3 are in clinical development for congestive heart failure. Clayton Foundation scientists Dr. Huising and the late Dr. Vale, who originally identified the urocortins, have found that these neuropeptides also play a role in the pancreas by increasing insulin secretion and promoting the division of insulin-producing beta cells. Long term expression of Ucn1 was shown to increase β-cell mass, while activation of both CRF1 and CRF2 was shown to synergistically enhance insulin secretion from human islets (Fig. 1). Urocortins may have several therapeutic roles in the management and treatment of diabetes (Fig. 2).

References & Intellectual Property


Available for licensing or partnering

For more information, please contact:

Dr. Alexandra Richardson  +41-76-342-7147 - arichardson@claytonbiotech.com

©2014 Clayton Biotechnologies Inc. – www.claytonbiotech.com