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## Product Datasheet

### Human Adiponectin Receptor 1 protein, His and GST tag, Unconjugated GTX00105-PRO

Article Name	Human Adiponectin Receptor 1 protein, His and GST tag, Unconjugated
Biozol Catalog Number	GTX00105-PRO
Supplier Catalog Number	GTX00105-pro
Alternative Catalog Number	GTX00105-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Human
Conjugation	Unconjugated
NCBI	<a href="#">51094</a>
UniProt	<a href="#">Q96A54</a>
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose, ProClin 300.
Expression System	E. coli
Form	Lyophilized powder
Sequence	N-terminal His and GST-Tag, Met1~Gly136 (NP_001277482.1)

## Application Notes

ADIPOR1 (Adiponectin receptor protein 1) is a receptor for ADP (30kDa adipocyte complement-related protein), an essential hormone secreted by adipocytes that regulates glucose and lipid metabolism. ADIPOQ-binding activates a signaling cascade that leads to increased AMPK activity, and ultimately to increased fatty acid oxidation, increased glucose uptake and decreased gluconeogenesis. Besides, human ADP and rat ADP exist similarities in amino acid sequence with the identity of 83.2% . Thus a binding ELISA assay was conducted to detect the interaction of recombinant human ADIPOR1 and recombinant rat ADP. Briefly, ADIPOR1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100  $\mu$ l were then transferred to ADP-coated microtiter wells and incubated for 2h at 37C. Wells were washed with PBST and incubated for 1h with anti-ADIPOR1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37C. Finally, add 50  $\mu$ l stop solution to the wells and read at 450nm immediately. The binding activity of of ADIPOR1 and ADP was in a dose dependent manner.