## Recombinant Human AMPK1 protein (GST Tag)

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Catalog Number: PDEH100794



Description **Species** Human Mol Mass 41.8 kDa Accession 013131-2 Not validated for activity **Bio-activity Properties** > 95% as determined by reducing SDS-PAGE. Purity Endotoxin < 10 EU/mg of the protein as determined by the LAL method Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 Storage °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at  $< -20^{\circ}$ C for 3 months. This product is provided as lyophilized powder which is shipped with ice packs. Shipping Formulation Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol. Reconstitution It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis. Data

KDa	М	R
80	-	
60	-	
40	-	
30	-	1
20		
12	-	

> 95 % as determined by reducing SDS-PAGE.

## Background

AMP-activated protein kinase (AMPK) is a heterotrimeric complex consisting of a catalytic alpha subunit and regulatory beta and gamma subunits. Each subunit exists as alternate isoforms (alpha 1, alpha 2, beta 1, beta 2, gamma 1, gamma 2, gamma 3), with all 12 combinations able to form complexes. The catalytic alpha subunit of AMPK is activated allosterically by AMP, and by phosphorylation via the AMPK kinases LKB1 and CaMKK beta. AMPK's role in metabolic regulation has implicated this serine/threonine kinase as a therapeutic target in heart disease, obesity, and diabetes.

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