6044 Cornerstone Court West, Suite E
San Diego, CA 92121
Tel: 1.858.829.3082
Fax: 1.858.481.8694
Email: info@bpsbioscience.com

Data Sheet

AMPK (A2/B1/G1)

Human, recombinant, C-terminal His-tag
Catalog #: 40024
Lot #: 141008 **Conc.:** 0.1 mg/ml

Formulated in: 50 mM sodium phosphate, pH 7.0, 300 mM NaCl, 150 mM imidazole, 0.1 mM PMSF, 0.25 mM DTT, and 25% glycerol.

Stability: >6 months at –80°C. *Avoid freeze/thaw cycles. Storing diluted enzyme is not recommended, if necessary, use carrier protein (BSA 0.1 – 0.5%).*

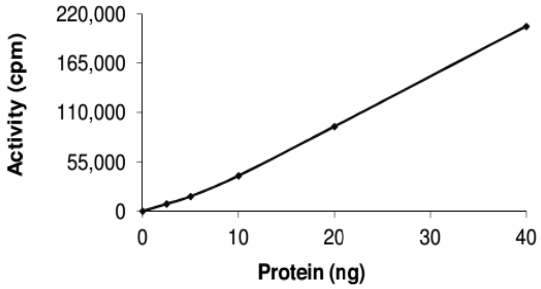
References:

1. Viollet, B., *Biochem Soc Trans.* 2003;**31**:216-219
2. Foretz, M., *Diabetes.* 2005;**54(5)**:1331-1339.

Description: Recombinant full-length human AMPK (combination of A2/B1/G1 subunits) was expressed by baculovirus in Sf9 insect cells using a C-terminal His-tag. The gene accession number for the three subunits (A2/B1/G1) is NM_006252, NM_006253, and NM_002733.
Specific Activity: 280 pmol/min/µg
Assay Buffer: 5 mM MOPS, 2.5 mM β-glycerophosphate, 5 mM $MgCl_2$, 1 mM EGTA, 0.4 mM EDTA, 0.05 mM DTT, 2 mM ATP. Incubate AMPK A2/B1G1 with 0.2 mg/ml SAMStide peptide substrate, 0.1 mM AMP, and [33P]-ATP at 30°C for 15 minutes, then spot reaction on phosphocellulose paper, fix in 1% phosphoric acid, and assay with a scintillation counter.
Application: Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

Quality Assurance

Specific Activity



10% SDS-PAGE
Coomassie staining

Lane 1: AMPK
Lane 2: Protein Marker

MW:
69 kDa (A2)
38 kDa (B1)
40 kDa (G1)
Purity: ≥80%