

## Product datasheet for TP317801M

### OriGene Technologies, Inc.

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# AMPK gamma 1 (PRKAG1) (NM\_212461) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human protein kinase, AMP-activated, gamma 1 non-catalytic subunit

(PRKAG1), transcript variant 2, 100 μg

Species: Human Expression Host: HEK293T

**Expression cDNA Clone** >RC217801 representing NM\_212461 or AA Sequence: Red=Cloning site Green=Tags(s)

METVISSDSSPAVENEHPQETPESNNSVYTSFMKSHRCYDLIPTSSKLVVFDTSLQVKKAFFALVTNGVR AAPLWDSKKQSFVGMLTITDFINILHRYYKSALVQIYELEEHKIETWREVYLQDSFKPLVCISPNASLFD AVSSLIRNKIHRLPVIDPESGNTLYILTHKRILKFLKLFITEFPKPEFMSKSLEELQIGTYANIAMVRTT TPVYVALGIFVQHRVSALPVVDEKGRVVDIYSKFDVINLAAEKTYNNLDVSVTKALQHRSHYFEGVLKCY

LHETLETIINRLVEAEVHRLVVVDENDVVKGIVSLSDILQALVLTGGEKKP

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-Myc/DDK

Predicted MW: 28.1 kDa

Concentration:  $>0.05 \mu g/\mu L$  as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 997626

**Locus ID:** 5571



#### AMPK gamma 1 (PRKAG1) (NM\_212461) Human Recombinant Protein - TP317801M

UniProt ID: P54619

RefSeq Size: 1756

Cytogenetics: 12q13.12

RefSeq ORF: 744

Synonyms: AMPKG; MGC8666

**Summary:** The protein encoded by this gene is a regulatory subunit of the AMP-activated protein kinase

(AMPK). AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. AMPK is an important energy-sensing enzyme that monitors cellular energy status. In response to cellular metabolic stresses, AMPK is activated, and thus phosphorylates and inactivates acetyl-CoA carboxylase (ACC) and beta-hydroxy beta-methylglutaryl-CoA reductase (HMGCR), key enzymes involved in regulating de novo biosynthesis of fatty acid and cholesterol. This subunit is one of the gamma regulatory subunits of AMPK. Alternatively spliced transcript variants encoding distinct isoforms have

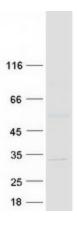
been observed. [provided by RefSeq, Jul 2008]

**Protein Families:** Druggable Genome

Protein Pathways: Adipocytokine signaling pathway, Hypertrophic cardiomyopathy (HCM), Insulin signaling

pathway

## **Product images:**



Coomassie blue staining of purified PRKAG1 protein (Cat# [TP317801]). The protein was produced from HEK293T cells transfected with PRKAG1 cDNA clone (Cat# [RC217801]) using MegaTran 2.0 (Cat# [TT210002]).