

## Product datasheet for **TP504858**

### Prkag1 (NM\_016781) Mouse Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse protein kinase, AMP-activated, gamma 1 non-catalytic subunit (Prkag1), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR204858 representing NM_016781 Red=Cloning site Green=Tags(s)

MESVAAESSPALENEHFQETPESNNSVYTSFMKSHRCYDLIPTSSKLWFDTSLQVKKAFFALVTNGVRA  
APLWDSKKQSFVGMILTDFINILHRYYSALVQIYELEEHKIETWREVYLQDSFKPLVCISPNASLFDA  
VSSLIRNKIHRPVIDPESGNTLYILTHKRILKFLKLFITEFPKPEFMSKSLQELQIGTYANIAMVRTTT  
PVYVALGIFVQHRVSALPVVDEKGRVVDIYSKFDVINLAAEKTYNNLDVSVTKALQHRSHYFEGVLKCYL  
HETLETIINRLVEAEVHRLVVVDEHDVWKGIVSLSDILQALVLTGGEKPP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	38 kDa
Concentration:	>0.05 µg/µL 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
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 after receiving vials.
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:	<a href="#">NP_058061</a>
Locus ID:	19082
UniProt ID:	<a href="#">O54950</a> , <a href="#">Q3TWR3</a>



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RefSeq Size:	1680
Cytogenetics:	15 54.73 cM
RefSeq ORF:	990
Synonyms:	AA571379; BB036179; Prkaac
Summary:	<p>AMP/ATP-binding subunit of AMP-activated protein kinase (AMPK), an energy sensor protein kinase that plays a key role in regulating cellular energy metabolism. In response to reduction of intracellular ATP levels, AMPK activates energy-producing pathways and inhibits energy-consuming processes: inhibits protein, carbohydrate and lipid biosynthesis, as well as cell growth and proliferation. AMPK acts via direct phosphorylation of metabolic enzymes, and by longer-term effects via phosphorylation of transcription regulators. Also acts as a regulator of cellular polarity by remodeling the actin cytoskeleton; probably by indirectly activating myosin. Gamma non-catalytic subunit mediates binding to AMP, ADP and ATP, leading to activate or inhibit AMPK: AMP-binding results in allosteric activation of alpha catalytic subunit (PRKAA1 or PRKAA2) both by inducing phosphorylation and preventing dephosphorylation of catalytic subunits. ADP also stimulates phosphorylation, without stimulating already phosphorylated catalytic subunit. ATP promotes dephosphorylation of catalytic subunit, rendering the AMPK enzyme inactive (By similarity).[UniProtKB/Swiss-Prot Function]</p>