

Product datasheet for TP503594

OriGene Technologies, Inc.

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Prkab1 (NM_031869) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse protein kinase, AMP-activated, beta 1 non-catalytic

subunit (Prkab1), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse

Expression Host: HEK293T

Expression cDNA Clone >MR203594 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MGNTSSERAALERQAGHKTPRRDSSGGAKDGDRPKILMDSPEDADIFHSEEIKAPEKEEFLAWQHDLEAN DKAPAQARPTVFRWTGGGKEVYLSGSFNNWSKLPLTRSQNNFVAILDLPEGEHQYKFFVDGQWTHDPSEP IVTSQLGTVNNIIQVKKTDFEVFDALMVDSQKCSDVSELSSSPPGPYHQEPYMSKPEERFKAPPILPPHL

LQVILNKDTGISCDPALLPEPNHVMLNHLYALSIKDGVMVLSATHRYKKKYVTTLLYKPI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK

Predicted MW: 30.3 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

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: NP 114075

Locus ID: 19079

UniProt ID: <u>Q9R078</u>, <u>Q542K0</u>

RefSeq Size: 2051





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Cytogenetics: 5 F

RefSeq ORF: 813

Synonyms: 1300015D22Rik; AU021155; E430008F22

Summary: Non-catalytic 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. Beta non-catalytic subunit acts as a scaffold on which the AMPK complex assembles, via its C-terminus that bridges alpha (PRKAA1 or PRKAA2) and gamma subunits (PRKAG1, PRKAG2 or

PRKAG3) (By similarity).[UniProtKB/Swiss-Prot Function]