

Product datasheet

Recombinant human AMPK alpha1 + AMPK beta1 + AMPK gamma1 protein ab79803

4 References 2 Images

Description

Product name	Recombinant human AMPK alpha1 + AMPK beta1 + AMPK gamma1 protein		
Biological activity	Specific Activity: 2755 nmol/min/mg.		
Purity	> 95 % SDS-PAGE. Affinity purified.		
Expression system	Baculovirus infected Sf9 cells		
Protein length	Full length protein		
Animal free	No		
Nature	Recombinant		
Species	Human		
Sequence	HHHHHHLVPR GSPEF MRRLSSWRKM ATA EKQKH DG RVKIGHYILG DTLGVGTF GK VKVGKHELTG HKVAVKILNR QKIRSLDVVG KIRREIQNLK LFRHPHI IKL YQVISTPSDI FMVMEYVSGG ELFDYICKNG RLDEKESRRL FQQILSGVDY CHRHMVVHRD LKPENVLLDA HMNAKIADFG LSNMMSDGEF LRTSCGSPNY AAPEVISGRL YAGPEVDIWS SGVILYALLC GTLPFDDDHV PTLFKKICDG IFYTPQY LNP SVISLLKHML QVDPMKRATI KDIREHEWFK QDLPKYLFPE DPSYSST MID DEALKEVCEK FECSEEEVLS CLYNRNHQDP LAVAYHLIID NRRIMNEAKD FYLATSP PDS FLDDHHLTRP HPERV PFLVA ETPRARHTLD ELNPQKSKHQ GVRKAKWHLG IRSQSRPNDI MAEVCRAIKQ LDYEWKV VNP YYLRVRRKNP VTSTYSKMSL QLYQVDSRTY LLDFRSIDDE ITEAKSGTAT PQRSGSVSNY RSCQRSDSDA EAQGKSSEVS LTSSVTSLDS SPVDLTPRPG SHTIEFFEMC ANLIKILAQF EPSGRPV LHH HHHH MGNTSSERAA LERHGGHKTP RRDSSGGTKD GDRPKILMDS PEDADLFHSE EIKAPEKEEF LAWQHDLEVN DKAPAQARPT VFRWTGGGKE VYLSGSFNNW SKLPLTRSHN NFVAILDLPE GEHQYKFFVD GQWTHDPSEP ITSQ LGTVN NIIQVKKTDF EVFDALMVDS QKCSDVSELS		

SSPPGPYHQE PYVCKPEERF RAPPILPPHL
 LQVILNKDTG ISCDPALLPE PNHVMLNHLY ALSIKDGVMV
 LSATHRYKKK YVTLLYKPI FEPGRPV LH HHHHH
 METVISSDSS PAVENEHPQE TPESNNSVYT
 SFMKSHRCYD LIPTSSKL VV FDTSLQV KKA
 FFALVTNGVR AAPLWDSKKQ SFVVLRALSC
 PLGMLTITDF INILHRYYS ALVQIYELEE HKIETWREVV
 LQDSFKPLVC ISPNASLFDA VSSLIRNKIH RLPVIDPESG
 NTLYLTHKR ILKFLKLFIT EFPKPEFMSK SLEELQIGTY
 ANIAMVRTTT PVYVALGIFV QHRVSALPVV DEKGRVVDIY
 SKFDVINLAA EKTNNLDVS VTKALQHRSH
 YFEGVLKCYL HETLETINR LVEAEVHRLV VVDENDVVKG
 VSLSDILQA LVL TGGEKKP FEPGRPV LH HHHHH

Tags His tag C-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab79803** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications Functional Studies
 SDS-PAGE

Form Liquid

Additional notes **ab204881** (Acetyl Coenzyme A Carboxylase peptide) can be utilized as a substrate for assessing kinase activity

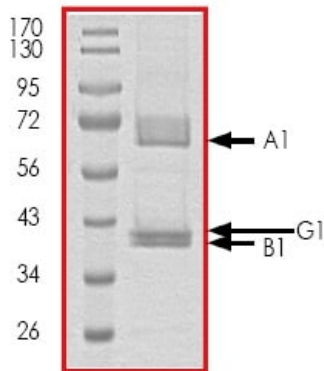
Preparation and Storage

Stability and Storage Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.
 pH: 7
 Constituents: 0.0038% EGTA, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCl, 0.00292% EDTA, 25% Glycerol (glycerin, glycerine), 0.87% Sodium chloride
 This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Relevance AMPK (5'-prime-AMP-activated protein) is a heterotrimer of an alpha catalytic subunit, a beta and a gamma non-catalytic regulatory subunits. It belongs to the ser/thr protein kinase family. AMPK is a cellular energy sensor conserved in all eukaryotic cells. The kinase activity of AMPK is activated by the stimuli that increase the cellular AMP/ATP ratio. AMPK regulates the activities of a number of key metabolic enzymes through phosphorylation. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic pathways. AMPK is also responsible for the regulation of fatty acid synthesis by phosphorylation of acetyl-CoA carboxylase. It regulates cholesterol synthesis via phosphorylation and inactivation of hydroxymethylglutaryl-CoA reductase and hormone-sensitive lipase.

Images



10% SDS-PAGE, Coomassie staining.

Lane 1: Protein marker.

Lane 2: ab79803

SDS-PAGE - Recombinant human AMPK alpha1 +
AMPK beta1 + AMPK gamma1 protein (ab79803)

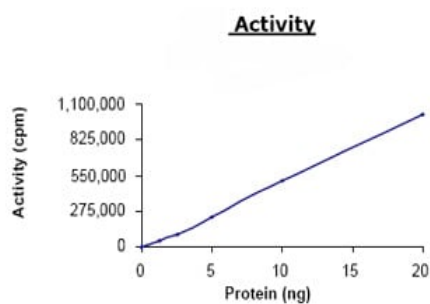


Image showing specific activity of ab79803.

Functional Studies - Recombinant human AMPK
alpha1 + AMPK beta1 + AMPK gamma1 protein
(ab79803)

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