

Recombinant human Calcium Activated Nucleotidase 1/CANT1 protein

Catalog Number: ATGP1338

PRODUCT INFORMATION

Expression system

E.coli

Domain

63-401aa

UniProt No.

Q8WVQ1

NCBI Accession No.

NP_620148

Alternative Names

Soluble calcium-activated nucleotidase 1, DBQD, SCAN-1, SCAN1, SHAPY

PRODUCT SPECIFICATION

Molecular Weight

40.5 kDa (364aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 50mM NaCl

Purity

> 90% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

CANT1 (calcium-activated nucleotidase 1) belongs to the apyrase family. This protein is calcium-dependent nucleotidase with a preference for uDP. The order of activity with different substrates is uDP > GDP > uTP > GTP. Also, it has very low activity towards ADP and even lower activity towards ATP. And it does not hydrolyze AMP and GMP. The specific function of CANT1 is as yet unknown, but its substrates are involved in several major signaling functions, including Ca²⁺ release, through activation of pyrimidinerbic signaling. Recombinant human CANT1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional

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chromatography techniques.

Amino acid Sequence

MGSSHHHHHH SGLVPRGSH MGSMPAPG RPPTHNAHW RLGQAPANWY NDTYPLSPPQ RTPAGIRYRI AVIADLDTES
RAQEENTWFS YLKKGYLTL DSGDKVAWEV DKDHGVLESH LAEKGRGMEL SDLIVFNGKL YSVDDRTGVV YQIEGSKAVP
WVILSDGDGT VEKGFKAEWL AVKDERLYVG GLGKEWTTTT GDVVNENPEW VKVVGKGSV DHENWVSNYN
ALRAAAGIQP PGYLIHESAC WSDTLQRWFF LPRRASQERY SEKDDERKGA NLLLSASPDF GDIAVSHVGA VVPTHGFSSF
KFIPNTDDQI IVALKSEEDS GRVASYIMAF TLDGRFLLPE TKIGSVKYEG IEFI

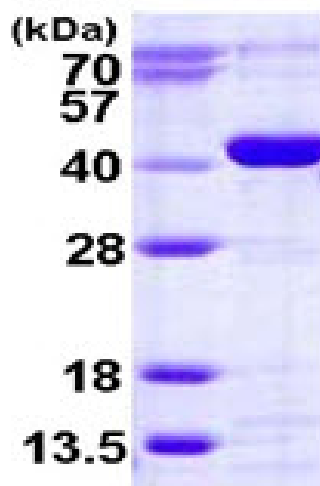
General References

Yang M., et al. (2004) *Biochemistry* 43:9185-9194

Huber C, et al. (2009) *Am J Hum Genet.* 85(5):706-10.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)