# abcam

# Product datasheet

# Recombinant human CAMK1G protein ab51400

# 4 Images

**Description** 

Product name Recombinant human CAMK1G protein

**Biological activity** Specific activity was determined to be 788 nmol/min/mg.

**Purity** > 90 % Densitometry.

Affinity purified.

Expression system Baculovirus infected Sf9 cells

Protein length Protein fragment

Animal free No

Nature Recombinant

Species Human
Amino acids 1 to 330

#### **Specifications**

Our Abpromise guarantee covers the use of ab51400 in the following tested applications.

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

Applications SDS-PAGE

**Functional Studies** 

**Form** Liquid

Additional notes ab188554 (CaMKII peptide) can be utilized as a substrate for assessing Kinase activity

This product was previously labelled as CaMKI gamma

#### **Preparation and Storage**

**Stability and Storage** Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 7.50

Constituents: 0.0038% EGTA, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCI, 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**

Function Calcium/calmodulin-dependent protein kinase belonging to a proposed calcium-triggered

signaling cascade. In vitro phosphorylates transcription factor CREB1.

Tissue specificity

Mainly expressed in brain with small amounts in skeletal muscles, kidney, spleen and liver.

Strongly expressed in forebrain neocortex, striatum and limbic system.

**Sequence similarities**Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CaMK subfamily.

Contains 1 protein kinase domain.

**Domain**The autoinhibitory domain overlaps with the calmodulin binding region and interacts in the inactive

folded state with the catalytic domain as a pseudosubstrate.

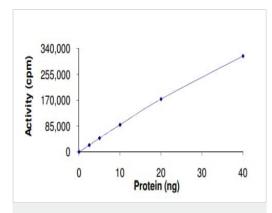
Post-translational modifications

May be prenylated on Cys-473.

Cellular localization

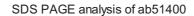
Cytoplasm. Golgi apparatus membrane. Cell membrane.

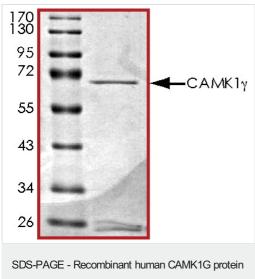
## **Images**



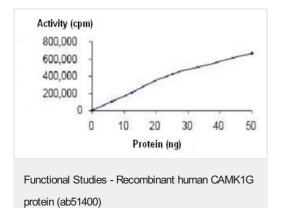
Functional Studies - Recombinant human CAMK1G protein (ab51400)

The specific activity of CAMK1G (ab51400) was determined to be 675 nmol/min/mg as per activity assay protocol

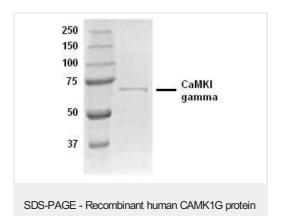




(ab51400)



Kinase activity assay. Specific activity 788 nmol/min/mg.



(ab51400)

Recombinant human CAMK1G (with proprietary tag) molecular weight 69 kDa.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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