# abcam

## Product datasheet

# Anti-Casein Kinase 1 gamma 2 antibody ab64829

★★★★★ 1 Abreviews 6 References 2 Images

Overview

Product name Anti-Casein Kinase 1 gamma 2 antibody

**Description** Rabbit polyclonal to Casein Kinase 1 gamma 2

Host species Rabbit

Tested applications Suitable for: WB

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

Immunogen Synthetic peptide derived from N-terminus of human Casein Kinase 1 gamma 2.

Positive control HeLa and 293 cell extracts.

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

**Storage instructions** Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride

Purity Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

**Applications** 

The Abpromise guarantee Our Abpromise guarantee covers the use of ab64829 in the following tested applications.

1

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

Application	Abreviews	Notes
WB	★★★☆☆(1)	1/500 - 1/1000. Detects a band of approximately 47 kDa (predicted molecular weight: 47 kDa).

### **Target**

#### **Function**

Serine/threonine-protein kinase. Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates. It can phosphorylate a large number of proteins. Participates in Wnt signaling (By similarity). Phosphorylates COL4A3BP/CERT, MTA1 and SMAD3. Involved in brain development and vesicular trafficking and neurotransmitter releasing from small synaptic vesicles. Regulates fast synaptic transmission mediated by glutamate. SMAD3 phosphorylation promotes its ligand-dependent ubiquitination and subsequent proteasome degradation, thus inhibiting SMAD3-mediated TGF-beta responses. Hyperphosphorylation of the serine-repeat motif of COL4A3BP/CERT leads to its inactivation by dissociation from the Golgi complex, thus down-regulating ER-to-Golgi transport of ceramide and sphingomyelin synthesis.

Tissue specificity

Testis.

Sequence similarities

Belongs to the protein kinase superfamily. CK1 Ser/Thr protein kinase family. Casein kinase I

subfamily

Contains 1 protein kinase domain.

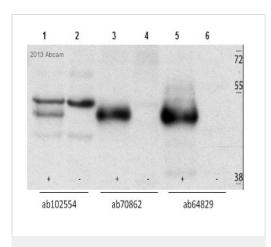
Post-translational modifications

Autophosphorylated.

**Cellular localization** 

Cytoplasm.

#### **Images**



Western blot - Anti-Casein Kinase 1 gamma 2 antibody (ab64829)

This image is courtesy of an anonymous Abreview

Lanes 1-2: Anti-Casein Kinase 1 gamma 2 antibody (ab102554)

Lanes 3-4 : Anti-Casein Kinase 1 gamma 2 antibody (ab70862)

Lanes 5-6: Anti-Casein Kinase 1 gamma 2 antibody (ab64829) at

1/500 dilution

Lanes 1 & 3 & 5: U2OS cells expressing FLAG-tagged CK1G2

plasmid

Lane 2: U2OS cells expressing FLAG tag only plasmid

Lanes 4 & 6: U2OS cells expressing FLAG only

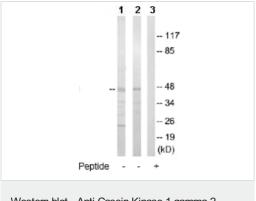
#### Secondary

Lanes 5-6: HRP-conjugated Goat anti-rabbit polyclonal at 1/1000

dilution

Developed using the ECL technique.

#### Predicted band size: 47 kDa



Western blot - Anti-Casein Kinase 1 gamma 2 antibody (ab64829)

**All lanes :** Anti-Casein Kinase 1 gamma 2 antibody (ab64829) at 1/500 dilution

Lane 1 : HeLa cell extract

Lane 2 : 293 cell extract

Lane 3: 293 cell extract with immunising peptide at 10 µg

Lysates/proteins at 30 µg per lane.

**Predicted band size:** 47 kDa **Observed band size:** 47 kDa

Additional bands at: 25 kDa, 34 kDa. We are unsure as to the

identity of these extra bands.

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

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