

Product datasheet

Anti-Casein Kinase 1 gamma 2 antibody ab230045

4 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, IP, IHC-P
Species reactivity	Reacts with: Mouse, Human
Immunogen	Recombinant fragment corresponding to Human Casein Kinase 1 gamma 2 aa 316-415. Sequence: FDRSGFVFDYEDWAGKPLPTPIGTVHTDLPSQPQLR DKTQPHSKNQALN STNGELNADDPTAGHSNAPITAPAEVEVADETKCCCF FKRRKRKSLQRHK Database link: P78368 Run BLAST with Run BLAST with
Positive control	WB: Mouse gonadal tissue; HeLa whole cell lysate. IHC-P: Human testis tissue and human breast cancer tissue. IP: HeLa whole cell lysate.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.3 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab230045** in the following tested applications.

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

Application	Abreviews	Notes
WB		1/1000 - 1/5000. Detects a band of approximately 47 kDa (predicted molecular weight: 47 kDa).
IP		1/200 - 1/2000.
IHC-P		1/20 - 1/200.

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.

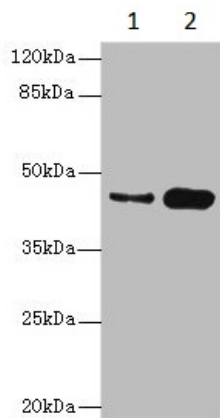
Tissue specificity Testis.

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 (ab230045)

All lanes : Anti-Casein Kinase 1 gamma 2 antibody (ab230045) at 1/1000 dilution

Lane 1 : Mouse gonadal tissue lysate

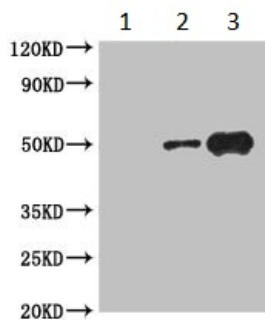
Lane 2 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Secondary

All lanes : Goat polyclonal to Rabbit IgG at 1/10000 dilution

Predicted band size: 47 kDa

Observed band size: 47 kDa



Immunoprecipitation - Anti-Casein Kinase 1 gamma 2 antibody (ab230045)

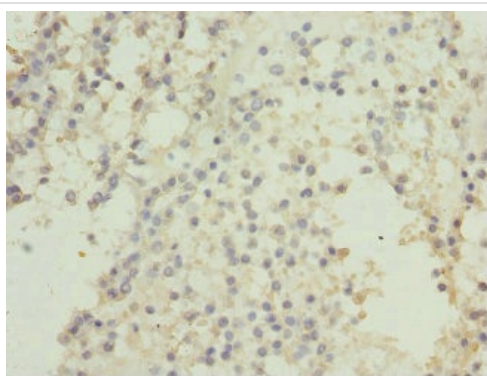
Casein Kinase 1 gamma 2 was immunoprecipitated from 500 μ g HeLa epithelial cell line from cervix adenocarcinoma) whole cell lysate with 4 μ g of ab230045. Western blot was performed from the immunoprecipitate using ab230045 at 1/1000 dilution.

Lane 1 : 1 μ g of Rabbit monoclonal IgG instead of ab230045 in HeLa whole cell lysate.

Lane 2 : ab230045 IP in HeLa whole cell lysate.

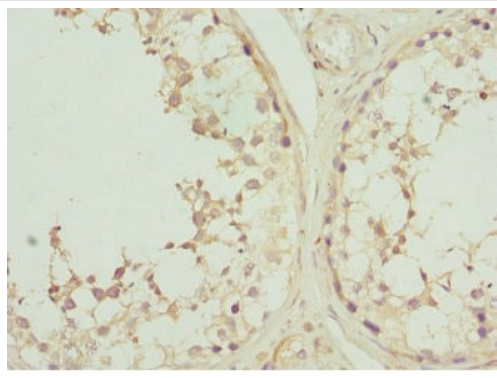
Lane 3 : HeLa whole cell lysate 20 μ g (input).

For western blotting, an HRP-conjugated anti-rabbit IgG, specific to the non-reduced form of IgG was used the secondary antibody (1/50,000).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Casein Kinase 1 gamma 2 antibody (ab230045)

Paraffin-embedded human breast cancer tissue stained for Casein Kinase 1 gamma 2 using ab230045 at 1/100 dilution in immunohistochemical analysis.



Paraffin-embedded human testis tissue stained for Casein Kinase 1 gamma 2 using ab230045 at 1/100 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Casein Kinase 1 gamma 2 antibody (ab230045)

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