

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse and rat Casein Kinase 2β in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Casein Kinase 2β Met1-His153 Accession # P67870
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Casein kinase 2 (CK2) is a ubiquitous, tetrameric serine/threonine kinase comprised of two catalytic subunits (CK2α and/or CK2α') and two identical regulatory subunits (CK2β). CK2 has been implicated in numerous cellular processes, including signal transduction, transcription, translation, replication, and metabolic pathways. CK2β undergoes phosphorylation at Ser-2, Ser-3 and Ser-209. CK2β also plays dual roles in the regulation of CK2 activity. The C-terminal domain is responsible for stable interactions with the catalytic subunit and increased catalytic activity following tetramer formation, while the N-terminal domain exerts negative regulation on the catalytic activity of CK2. CK2 is known to phosphorylate more than 300 different substrates. Phosphorylation of cell-cycle proteins such as p53, p34^{cdc2}, p27^{KIP1}, and MDM-2 account for the ability of CK2 to induce proliferation, while the phosphorylation of HS1, Bid, and Max account for its antiapoptotic role.

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