

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human/Mouse/Rat                                                                                                                                                                                                                                                             |
| <b>Specificity</b>        | Detects endogenous human, mouse, and rat CK1γ in Western blots. In Western blots, the immunogen is derived from a region of human CK1γ that is 97% to 98% identical to human CK1γ <sup>2</sup> and CK1γ <sup>3</sup> , so all three isoforms should be detected.            |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human CK1γ<br>Val182-Tyr304<br>Accession # Q9HCP0                                                                                                                                                                                       |
| <b>Conjugate</b>          | Alexa Fluor 750<br>Excitation Wavelength: 749 nm<br>Emission Wavelength: 775 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

#### PREPARATION AND STORAGE

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

#### BACKGROUND

Casein Kinase 1 (CK1) represents a group of serine/threonine protein kinases that are present in all eukaryotic organisms. Human CK1 isoforms (α, β, γ<sup>1</sup>, γ<sup>2</sup>, γ<sup>3</sup>, δ and ε) act as monomeric constitutively active enzymes that phosphorylate key regulatory proteins involved in the control of cell differentiation, proliferation, chromosome segregation and circadian rhythms. CK1 family members share a highly conserved kinase domain but differ in their variable N- and C-terminal domains. The C-termini of the γ isoforms carry putative palmitoylation sites unique within the CK1 family that are believed to anchor the proteins in the plasma membrane.

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