

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human DGK-β in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human DGK-α, γ, ε, ι, κ, θ, or ζ is observed.                                                                                              |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>1</sub> Clone # 646523                                                                                                                                                                                                                            |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human DGK-β<br>Met1-Ser143<br>Accession # Q9Y6T7                                                                                                                                                                                        |
| <b>Conjugate</b>          | Alexa Fluor 405<br>Excitation Wavelength: 405 nm<br>Emission Wavelength: 421 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.

**Western Blot** 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

Diacylglycerol kinase beta (DGK-β) is an approximately 90 kDa kinase that phosphorylates the lipid diacylglycerol. It is expressed in the brain and colocalizes with D1 and D2 dopamine receptors. DGK-β promotes the formation and maturation of dendritic spines. It contains two EF-hand motifs (aa 149-184 and 194-229), two zinc finger regions (aa 244-294 and aa 309-358), and a catalytic domain (aa 434-568). Alternate splicing generates an additional isoform with a 31 aa C-terminal deletion. Over aa 1-143, human DGK-β shares 97% aa sequence identity with mouse and rat DGK-β.

## PRODUCT SPECIFIC NOTICES

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