bs-4022R **[Primary Antibody]**

phospho-PRKAR2A (Ser99) Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 5576 **SWISS:** P13861

Target: PRKAR2A (Ser99)

Immunogen: KLH conjugated Synthesised phosphopeptide derived from human PKA R2 around the phosphorylation site of Ser99: RV(p-S)VC.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: The second messenger cyclic AMP (cAMP) mediates diverse cellular responses to external signals such as proliferation, ion transport, regulation of metabolism and gene transcription by activation of the cAMP-dependent protein kinase (cAPK or PKA). Activation of PKA occurs when cAMP binds to the two regulatory subunits of the tetrameric PKA holoenzyme, resulting in release of active catalytic subunits. Activation of transcription upon elevation of cAMP levels results from translocation of PKA to the nucleus, where it phosphorylates the transcription factor cAMP response element binding protein (CREB) on Serine 133, which in turn leads to TFIIB binding to TATA-box-binding protein TBP1, thus linking phospho-CREB to the Pol II transcription initiation complex. Mouse Serine 96 (designated Ser 99 in human) is a phosphorylation site on the PKA II?regulatory subunit.

Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
ELISA (1:5000-10000)

Reactivity: Human (predicted: Mouse, Rat)

Predicted MW.: 45 kDa

Subcellular Location: Cell membrane ,Cytoplasm

SELECTED CITATIONS

- **[IF=5.6]** Yanfei Shi. et al. Naringenin promotes the expression of oxidized myofibers via the PKA signaling pathway in C57BL/6J mice and C2C12 cells. J FUNCT FOODS. 2023 Dec;111:105902 WB ;Mouse. 10.1016/j.jff.2023.105902