

Product Information

Anti-PRKACA

produced in rabbit, affinity isolated antibody

Catalog Number: **SAB4200318**

Product Description

Anti-PRKACA is produced in rabbit using as immunogen a synthetic peptide corresponding to the N-terminal region of human PRKACA (Gene ID: 5566) conjugated to KLH. The corresponding sequence differs by 2 and 3 amino acids in mouse and rat, respectively. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-PRKACA recognizes human PRKACA. The antibody may be used in several immunochemical techniques including immunoblotting (~40 kDa). Detection of the PRKACA band by immunoblotting is specifically inhibited by the immunizing peptide.

PRKACA (also known cAMP-dependent protein kinase catalytic subunit alpha, PKA C-alpha and PKACA) is a member of the Serine/ Threonine protein kinase family. It is a catalytic subunit of cAMP-dependent protein kinase (PKA), a ubiquitous signaling molecule that mediates multiple extracellular signals in eukaryotic cells. The PKA holoenzyme consists of two catalytic subunits bound to two regulatory subunits in a tetrameric complex. Three known genes encode for the mammalian catalytic subunit: the $C\alpha$ gene, which is ubiquitously expressed, the $C\beta$ gene which is also ubiquitously expressed but generally at lower levels than $C\alpha$,¹ and the $C\gamma$ gene, which is expressed in a cell specific manner in spermatogenic cells.²

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working antibody concentration of 0.25- 0.5 μ g/mL is recommended using lysates of HEK-293T cells over-expressing human PRKACA.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

References

1. Showers, M.O., and Maurer, R.A., *J. Biol. Chem.* **261**, 16288-16291(1986).
2. Beebe, S.J., et al., *Mol. Endocrinol.*, **4**, 465-475 (1990).

SG,RC,KAA,PHC 07/11-1

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