3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

ProductInformation

Anti-Phosphodiesterase 6β
(Anti-PDE 6β)
Developed in Rabbit, Affinity Isolated Antibody

Product Number **P 8871**

Product Description

Anti-Phosphodiesterase 6β (Anti-PDE 6β) is developed in rabbit using synthetic peptides H(20)QYFG(K/R)KLSPENVAGAC(36) as immunogen. The peptides correspond to amino acid residues 20-36 from mouse and bovine PDE 6β. The antibody is affinity purified.

Anti-PDE 6β specifically recognizes a ~90 kDa protein representing PDE 6β from mouse retinal extracts by immunoblotting.

PDE 6 is the effector enzyme in the G protein-mediated signal transduction cascade in the visual system. There are five different subunits consisting of rod and cone specific catalytic subunits: α' (Cone), α (Rod), and β (Rod), the inhibitory subunit γ, and subunit δ of unknown function (which likely interacts with many other proteins besides the PDE 6 family). The catalytic core of the PDE 6 system is comprised of α'/α' homodimers in the cone and α/β heterodimers in the rod. The C-terminus of both the catalytic and inhibitory subunits is modified by methylation, myristyolation and prenylation which have been shown to be critical for proper complex assembly and membrane association.

Reagents

The antibody is provided as 100 µg of epitope affinity purified IgG in PBS containing 1 mg/ml BSA and 0.05% sodium azide as a preservative.

Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazardous and safe handling.

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 is not recommended. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

The recommended working dilution is 2 µg/ml for immunoblotting.

Note: In order to obtain best results and assay sensitivities of different techniques and preparations, we recommend determining optimal working dilutions by titration test.

References

1. He, F., et al., Multiple zinc binding sites in retinal rod cGMP phosphodiesterase, PDE 6α/β, J. Biol. Chem., **275**, 20572-20577 (2000).
2. Granovsky, A.E., and Artemyev, N.O., Identification of the γ subunit-interacting residues on photoreceptor cGMP phosphodiesterase, PDE 6α', J. Biol. Chem., **275**, 41258-41262 (2000).

MCT,PHC 12/04-2