ProductInformation

MONOCLONAL ANTI-RHODOPSIN KINASE 1a
Clone G8
Purified Immunoglobulin

Product Number **R 3151**

Product Description
Monoclonal Anti-Rhodopsin Kinase 1a (GRK1a) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes from a BALB/c mouse immunized with full length human GRK1.

Monoclonal Anti-Rhodopsin Kinase 1a recognizes an epitope in the C-terminal region of human, mouse, rat, bovine and chicken GRK1a by immunoblotting, immunoprecipitation and immunofluorescence. This antibody does not cross-react with other G protein-coupled kinases, including GRK1b.

The G protein-coupled receptor kinases (GRKs) are enzymes that mediate the desensitization of activated G protein-coupled receptors. Seven members of this family have been identified to date.[1] GRK1, a serine/threonine protein kinase, phosphorylates photoactivated rhodopsin (Rho*), inititating steps in its deactivation. By breaking the cycle of phototransduction, GRK1 plays an important role in the restoration of the system for subsequent visual events.

GRK1a is expressed in both rods and cones. In humans and chickens, GRK1b has been identified as a splice variant that contains the last intron of the GRK1 mRNA but exhibits low catalytic activity.[2]

Reagent
Monoclonal Anti-Rhodopsin Kinase 1a is supplied as 100 µg of purified IgG in phosphate buffered saline with 0.05% sodium azide as 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
Store at –20 °C. 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 concentration is 1 µg/ml for immunoblotting and immunofluorescence. The working concentration for immunoprecipitation is assay dependent.

Immunofluorescence experiments on human retina using this antibody yield intense staining primarily in the cone and rod outer segments. Weak staining is observed in the somata and synaptic terminals of cones and the inner segments of rods.

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. Zhao, X. et al., FEBS Lett., **454**, 115-121 (1999).
2. Zhoa, X. et al., J. Biol. Chem., **273**, 5124-5131 (1998).

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