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ProductInformation

Anti-Gα i3
produced in rabbit, whole antiserum

Catalog Number **G4040**

Product Description

Anti-Gα i3 is produced in rabbit using as immunogen a synthetic peptide KNNLKECGLY corresponding to the C-terminal region of Gα i3.

Anti-Gα i3 recognizes Gα i3, ~40 kDa, and Gα o by immunoblotting and immunoprecipitation. It reacts with human, rat, mouse, and hamster Gα i3 and Gα o, and has low cross-reactivity with other G-proteins.

Gα i3 is a G-protein subunit that is involved in many signal transduction pathways including the mediation of EGF-induced PLC-γ activation and Ca^{+2} mobilization in hepatocytes[1,2]. G-proteins are membrane associated heterotrimeric proteins that are comprised of α-, β-, and λ-subunits. The α-subunit contains a guanine-binding domain that is in its inactive state when it is occupied by GDP. Upon activation, GDP is replaced with GTP, causing the dissociation of the α-subunit from the βλ-subunit complex. This enables the Gα-GTP complex to bind to and regulate specific signaling pathways. GTP is then hydrolyzed, allowing for re-association of the α-subunit with the βλ-subunit complex.

Reagents

Supplied as whole antiserum. Each vial contains ~50 µL

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.

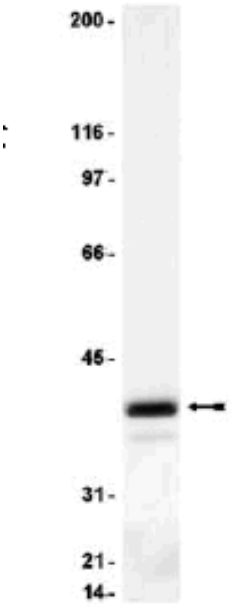
Storage/Stability

Store at –20 °C. 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

Immunoblotting: the recommended working dilution is 1:2000 using solubilized mouse and rat brain membrane lysates, and mouse 3T3 cell lysate.

Immunoprecipitation: 4 µL is recommended to precipitate Gα i3 from a solubilized mouse brain membrane lysate.



Immunoblot Analysis
Mouse brain membrane extract was resolved by electrophoresis, transferred to nitrocellulose and probed with anti-Gα i3 (1:2000 dilution). Proteins were visualized using a goat anti-rabbit secondary antibody conjugated to HRP and a chemiluminescence detection system. Arrow indicates Gα i3, ~40kDa.

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

References

1. Yang, L.J., et al., *J. Biol. Chem.*, **266**, 22451 (1991).
2. Lynch, C.J., et al., *J. Clin. Invest.*, **83**, 2050 (1989).

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