

GA_i-GTP

Anti-GA_iGTP Mouse Monoclonal Antibody

Gene Symbol: Gnai

Description: Anti-GA_i-GTP Mouse Monoclonal Antibody

Background: Heterotrimeric G proteins are critical cellular signal transducers. GA_i represents one sub-family of G proteins that could mediate the inhibition of adenylyl cyclases. Other biochemical and physiological functions of GA_i proteins are being explored.

Immunogen: Recombinant full length protein of active GA_{i1}

Applications: IP, IHC and IF (**Not applicable for WB since SDS denatures GA_iGTPase**)

Published Applications: [IP, IHC and IF - Click for Details](#)

Recommended Dilutions:

IP: 1 µg for 1~2 mg total cellular proteins

IHC, IF: 1:50-1:250

Concentration: 1 mg/ml

Host Species: Mouse

Format: Liquid

Clonality: Monoclonal

Isotype: IgG1

Purity: Purified from ascites

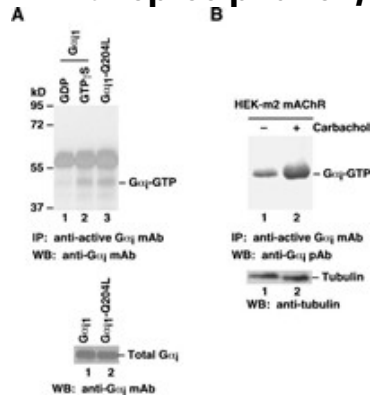
Preservative: No

Constituents: PBS (without Mg²⁺ and Ca²⁺), pH 7.4, 150 mM NaCl, 50% glycerol

Species Reactivity: Anti-active GA_i antibody recognizes active GA_{i1}, GA_{i2}, and GA_{i3} of vertebrates.

Storage Conditions: Store at -20°C. Avoid repeated freezing and thawing

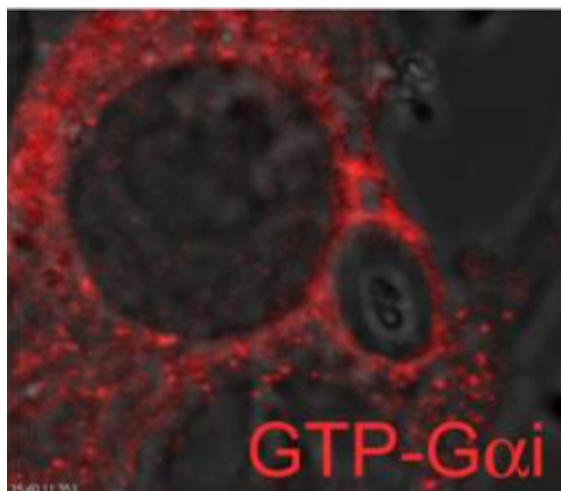
Immunoprecipitation/Western blot:



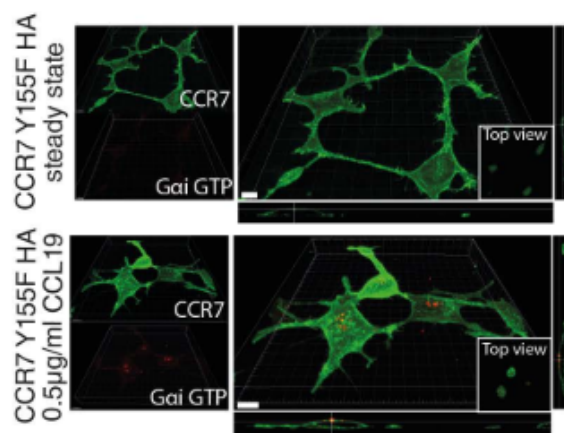
$G\alpha_i$ activation assay.

A. CHO cells were transfected with wild type $G\alpha_i$ (lanes 1 and 2) or constitutively active $G\alpha_i$ -Q204L (lane 3). Cell lysates were treated with GDP (lane 1) or GTP γ S (lane 3). Lysates were then incubated with an anti-active $G\alpha_i$ monoclonal antibody (Cat. No.26901) (top panel). The precipitated active $G\alpha_i$ was immunoblotted with an anti- $G\alpha_i$ monoclonal antibody (Cat. No. 26003). The bottom panel shows the Western blot with anti- $G\alpha_i$ monoclonal antibody (Cat.No. 26003) of the cell lysates.

B. HEK293 cells stably expressing human m2 mAChR were treated with (lane 2) or without (lane 1) carbachol. Cell lysates were then incubated with an anti-active $G\alpha_i$ monoclonal antibody (Cat. No. 26901) (top panel). The precipitated active $G\alpha_i$ was immunoblotted with an anti- $G\alpha_i$ rabbit polyclonal antibody (Cat. No. 21006). The bottom panel shows the Western blot with anti-tubulin of the cell lysates.



C. Confocal microscopy images of RAW 264.7 cells expressing YFP- $G\alpha_i$ 2QL or YFP- $G\alpha_i$ 2 immunostained for GTP- $G\alpha_i$ delineated by phalloidin-Alexa Fluor 647 staining



G-protein activation in HEK293 cells expressing CCR7 variants was visualized by confocal microscopy using an antibody specifically recognizing active, GTP-bound $G\alpha_i$



Product Description

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