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Anti-GNG2 Antibody Picoband™ (monoclonal, 7C13)

Catalog # ABO15090

Specification

Anti-GNG2 Antibody Picoband™ (monoclonal, 7C13) - Product Information

Application	**WB, IF, ICC**
Primary Accession	P59768
Host	**Mouse**
Isotype	**Mouse IgG2b**
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Format	**Lyophilized**

Description
Anti-GNG2 Antibody Picoband™ (monoclonal, 7C13) . Tested in IF, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.

Reconstitution
Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.

Anti-GNG2 Antibody Picoband™ (monoclonal, 7C13) - Additional Information

Gene ID 54331

Other Names
Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-2, G gamma-I, GNG2

Calculated MW
12 kDa KDa

Application Details
Western blot, 0.25-0.5 µg/ml, Mouse, Rat
 Immunocytochemistry/Immunofluorescence, 5 µg/ml, Human

Contents
Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.

Immunogen
E.coli-derived human GNG2 recombinant protein (Position: A2-D48).

Purification
Immunogen affinity purified.

Storage	**At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.**

Anti-GNG2 Antibody Picoband™ (monoclonal, 7C13) - Protein Information

Name GNG2

Function
Guanine nucleotide-binding proteins (G proteins) are involved as a modulator or transducer in various transmembrane signaling systems (PubMed:29925951, PubMed:33762731, PubMed:34239069, PubMed:35610220, PubMed:35714614, PubMed:35835867, PubMed:36087581, PubMed:36989299, PubMed:37327704, PubMed:37935376, PubMed:37935377, PubMed:37963465, PubMed:38168118, PubMed:38552625). The beta and gamma chains are required for the GTPase activity, for replacement of GDP by GTP, and for G protein-effector interaction (PubMed:29925951, PubMed:33762731, PubMed:34239069, PubMed:35610220, PubMed:35714614, PubMed:35835867, PubMed:36087581, PubMed:36989299, PubMed:37327704, PubMed:37935376, PubMed:37935377, PubMed:37963465, PubMed:38168118, PubMed:38552625).

Cellular Location
Cell membrane; Lipid-anchor; Cytoplasmic side

Tissue Location
Expressed in fetal tissues, including testis, adrenal gland, brain, white blood cells and brain

Anti-GNG2 Antibody Picoband™ (monoclonal, 7C13) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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Anti-GNG2 Antibody Picoband™ (monoclonal, 7C13) - Images

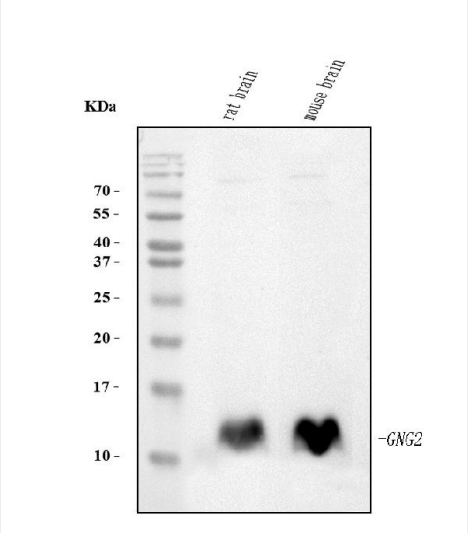

Figure 1. Western blot analysis of GNG2 using anti-GNG2 antibody (M06975-1).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: rat brain tissue lysates,
Lane 2: mouse brain tissue lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-GNG2 antigen affinity purified monoclonal antibody (Catalog # M06975-1) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for GNG2 at approximately 12 kDa. The expected band size for GNG2 is at 8 kDa.

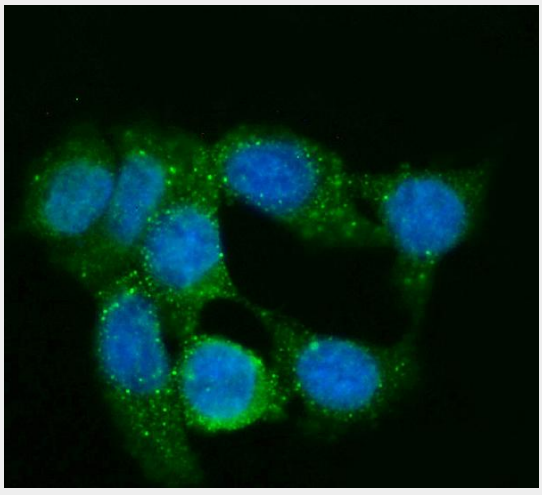

Figure 2. IF analysis of GNG2 using anti-GNG2 antibody (M06975-1).
GNG2 was detected in an immunocytochemical section of Caco-2 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 µg/mL mouse anti-GNG2 Antibody (M06975-1) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used

as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

Anti-GNG2 Antibody Picoband™ (monoclonal, 7C13) - Background

Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-2 is a protein that in humans is encoded by the GNG2 gene. This gene encodes one of the gamma subunits of a guanine nucleotide-binding protein. Such proteins are involved in signaling mechanisms across membranes. Various subunits forms heterodimers which then interact with the different signal molecules.