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GNA13 Recombinant Mouse mAb

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Catalog # AP94521

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC
Host	Rabbit
Clonality	Recombinant
Physical State	Liquid
Isotype	IgG1, Kappa
Purity	affinity purified by Protein G
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell Membrane; lipid-anchor.
SIMILARITY	Belongs to the G-alpha family. G(12) subfamily.
SUBUNIT	G proteins are composed of 3 units; alpha, beta and gamma. The alpha chain contains the guanine nucleotide binding site. Interacts with UBXD5. Interacts with HAX1.
Post-translational modifications	Palmitoylation is critical for proper membrane localization and signaling. Phosphorylation on Thr-203 by PKA destabilizes the heterotrimer of alpha, beta and gamma, and inhibits Rho activation.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Heterotrimeric G proteins function to relay information from cell surface receptors to intracellular effectors. Each of a very broad range of receptors specifically detects an extracellular stimulus (a photon, pheromone, odorant, hormone or neurotransmitter) while the effectors (i.e., adenyl cyclase), which act to generate one or more intracellular messengers, are less numerous. In mammals, G protein Alpha, Beta and Gamma polypeptides are encoded by at least 16, 4 and 7 genes, respectively. Most interest in G proteins has been focused on their Alpha subunits, since these proteins bind and hydrolyze GTP and most obviously regulate the activity of the best studied effectors. Four distinct classes of G Alpha subunits have been identified; these include G Alpha s, G Alpha i, G Alpha q and G Alpha 12/13. The two members of the fourth class of G Alpha subunit proteins, G Alpha 12 and G Alpha 13, are insensitive to ADP-ribosylation by pertussis toxin, share 67% identity with each other and less than 45% identity with other G Alpha subunits and are widely expressed in a broad range of tissues.

Additional Information

Dilution	WB=1:500-1:1000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:50,IF=0
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

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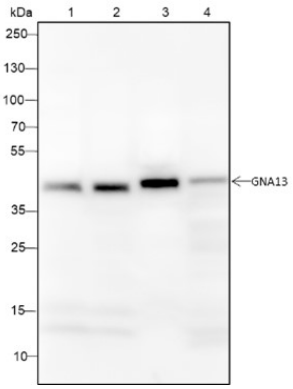
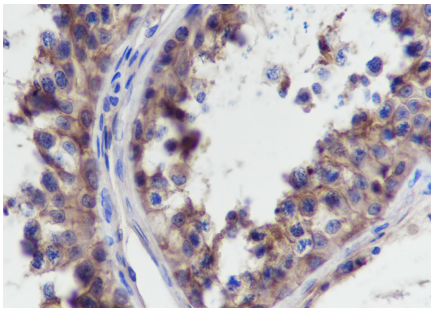
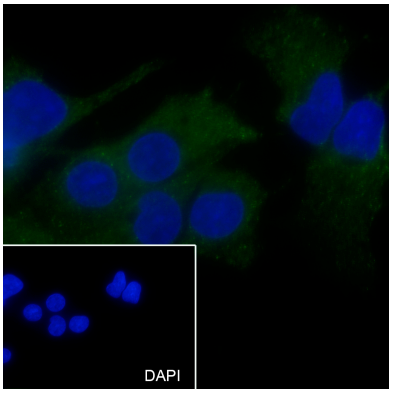
Images



Blocking buffer: 5% NFDM/TBST Primary Ab dilution: 1:1000 Primary Ab incubation condition: 4°C overnight Secondary ab: Goat Anti-Mouse IgG H&L (HRP) Lysate: 1: HEK-293, 2: HepG2, 3: Rat brain, 4: Neuro-2a Protein loading quantity: 20 µg Exposure time: 30 s Predicted MW: 44 kDa Observed MW: 44 kDa



Tissue: Human testis Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary Ab dilution: 1:100 Primary Ab incubation condition: 1 hour at room temperature Secondary Ab: SP Kit(Mouse)(sp-0024) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for AP94521



Cell line: HepG2 Fixative: 100% Ice-cold methanol Permeabilization: 0.1% TritonX-100 Primary Ab dilution: 1:50 Primary incubation condition: 4°C overnight Secondary Ab: Goat Anti-Mouse IgG Nuclear counter stain: DAPI (Blue) Comment: Color green is the positive signal for AP94521