abcam

Product datasheet

Anti-GNAI1 + GNAI2 antibody ab3522

5 References 2 Images

Overview

Product name	Anti-GNAI1 + GNAI2 antibody
Description	Rabbit polyclonal to GNAI1 + GNAI2
Host species	Rabbit
Specificity	Similarity with other sequences from the G protein family is predicted but has not being tested empirically.
Tested applications	**Suitable for:** IHC-P, ICC
Species reactivity	**Reacts with:** Human **Predicted to work with:** Chicken, Guinea pig, Hamster, Cow, Dog, Xenopus laevis, Starfish
Immunogen	Synthetic peptide corresponding to Human GNAI1 + GNAI2 aa 300-400. Database link: **P63096** (Peptide available as **ab5006**) Run BLAST with Run BLAST with
Positive control	IHC-P: Human tonsil tissue. ICC: SH-SY5Y cells.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 99% PBS
Purity	Immunogen affinity purified
Primary antibody notes	The G protein family of signal transducers includes the alpha, beta, gamma subunits and the

effector which are most clearly distinguished by their different alpha chains. The family also includes Gs and Gi, the stimulatory and inhibitory GTP-binding regulators of adenylate cyclase; Go, a protein of unknown function that is abundantly expressed in brain; and transducin 1 and 2, proteins involved in retinal phototransduction. The G proteins possess GTPase activity and are components of a complex membrane signaling system that includes membrane-bound receptors. The system exists to modulate extracellular signals as they are transmitted into the cell.

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab3522 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC		Use a concentration of 2 µg/ml.

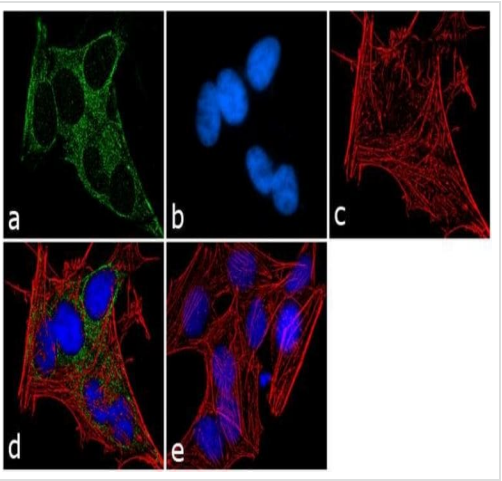
Target

Function Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems. The G(i) proteins are involved in hormonal regulation of adenylate cyclase: they inhibit the cyclase in response to beta-adrenergic stimuli. The inactive GDP-bound form prevents the association of RGS14 with centrosomes and is required for the translocation of RGS14 from the cytoplasm to the plasma membrane. May play a role in cell division.

Sequence similarities Belongs to the G-alpha family. G(i/o/t/z) subfamily.

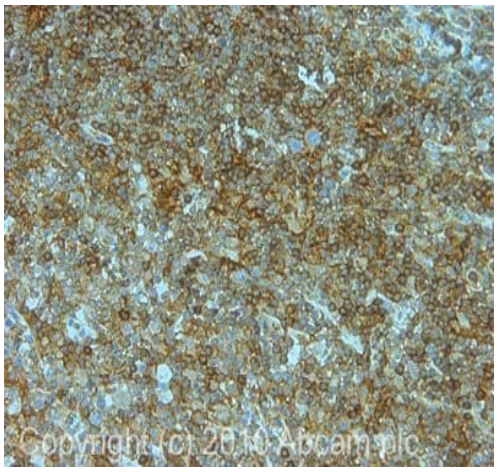
Cellular localization Nucleus. Cytoplasm. Cell membrane. Cytoplasm > cytoskeleton > centrosome. Localized at the plasma membrane throughout mitosis. Colocalizes with RIC8A and RGS14 at the plasma membrane (By similarity). Localizes in the centrosomes of interphase and mitotic cells, but not in centrosomes during cytokinesis. Detected at the cleavage furrow or the midbody.

Images



Immunocytochemistry - Anti-GNAI1 + GNAI2 antibody (ab3522)

SH-SY5Y cells stained for GNAI1 (green) using ab3522 at 2 µg/mL in immunocytochemical analysis. The nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI, F-actin (Panel c: red) was stained with Alexa Fluor® 555 Rhodamine Phalloidin. Panel e shows the no primary antibody control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GNAI1 + GNAI2 antibody (ab3522)

IHC image of ab3522 staining in Human tonsil formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab3522, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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