

Anti-GPR116 Antibody

Rabbit polyclonal antibody to GPR116 Catalog # AP60174

Specification

Anti-GPR116 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, IF/IC, IHC <u>O8IZF2</u> Human, Mouse, Rat Rabbit Polyclonal 149457

Anti-GPR116 Antibody - Additional Information

Gene ID 221395

Other Names KIAA0758; Probable G-protein coupled receptor 116

Target/Specificity Recognizes endogenous levels of GPR116 protein.

Dilution WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A IHC~~1:100~500

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Anti-GPR116 Antibody - Protein Information

Name ADGRF5 (<u>HGNC:19030</u>)

Synonyms GPR116, KIAA0758

Function

Adhesion G protein-coupled receptor (PubMed:28570277). In alveolar type II (ATII or AT2) cells, required for normal lung surfactant homeostasis (PubMed:28570277). Modulation of both surfactant secretion and uptake by ATII cells is mediated by the downstream activation of GNAQ/GNA11 proteins and may be a consequence of increased cortical F-actin assembly induced



by ADGRF5 activation (PubMed:28570277). In the kidney, may play a role in the regulation of acid excretion into the primary urine, possibly by regulating the surface expression of V-ATPase proton pump (By similarity). As a receptor for soluble FNDC4 (sFNDC4), required for proper systemic glucose tolerance, specifically sensitizing white adipose tissue to insulin. Also plays a role in sFNDC4-induced decrease of local inflammation in white adipose tissue (PubMed:34016966).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

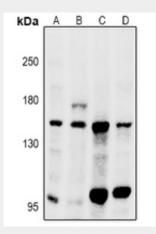
Expressed in lung endothelial cells and in alveolar type II (ATII) cells (at protein level) (PubMed:23684610, PubMed:28570277). Expressed high levels in subcutaneous adipose tissue in lean individuals and at lower levels in visceral fat. Expression levels in subcutaneous adipose tissue drastically drop in obese individuals (PubMed:34016966).

Anti-GPR116 Antibody - Protocols

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

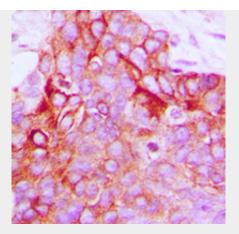
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-GPR116 Antibody - Images

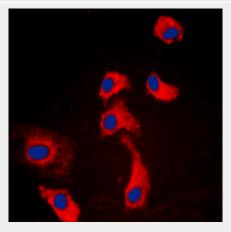


Western blot analysis of GPR116 expression in 3T3L1 (A), PC12 (B), HEK293T (C), A549 (D) whole cell lysates.





Immunohistochemical analysis of GPR116 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody 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.



Immunofluorescent analysis of GPR116 staining in HEK293T cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

Anti-GPR116 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human GPR116. The exact sequence is proprietary.