

Anti-GPR116 Antibody

Catalog # AP60174

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q8IZF2
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	149457

Additional Information

Gene ID	221395
Other Names	KIAA0758; Probable G-protein coupled receptor 116
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human GPR116. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	ADGRF5 (HGNC:19030)
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).

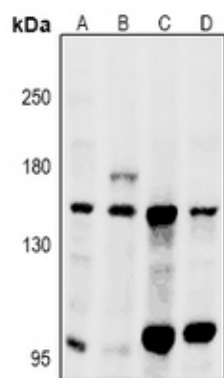
Cellular Location

Cell membrane; Multi-pass membrane protein

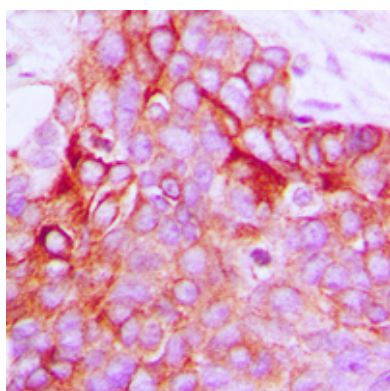
Tissue Location

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).

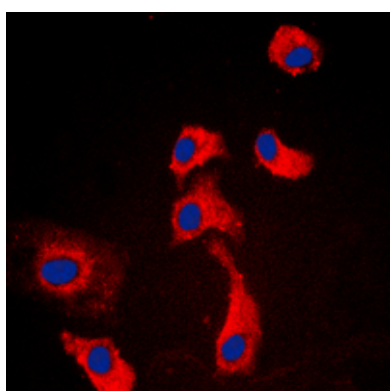
Images



Western blot analysis of GPR116 expression in 3T3L1 (A), PC12 (B), HEK293T (C), A549 (D) whole cell lysates. (Predicted band size: 149 kD; Observed band size: 150 kD)

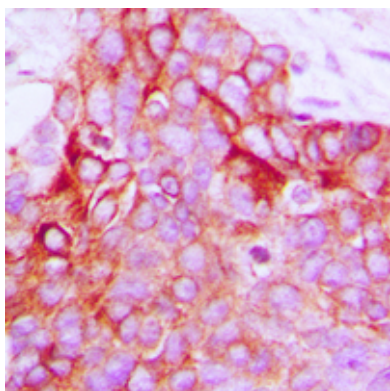


Immunohistochemical analysis of GPR116 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected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

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