

Product datasheet

Anti-Puma gamma/GPR109A antibody ab81825

1 References 2 Images

Overview

Product name	Anti-Puma gamma/GPR109A antibody
Description	Rabbit polyclonal to Puma gamma/GPR109A
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide corresponding to Human Puma gamma/GPR109A aa 250-350 conjugated to keyhole limpet haemocyanin. (Peptide available as ab101077)
Positive control	This antibody gave a positive signal in Human liver tissue lysate.
General notes	This product was previously labelled as Puma gamma

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: 0.02% Sodium Azide Constituents: 1% BSA, PBS, pH 7.4
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab81825** 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
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 41 kDa (predicted molecular weight: 41 kDa).
ICC/IF		Use a concentration of 5 µg/ml.

Target

Function

Acts as a high affinity receptor for both nicotinic acid (also known as niacin) and (D)-beta-hydroxybutyrate and mediates increased adiponectin secretion and decreased lipolysis through G(i)-protein-mediated inhibition of adenylyl cyclase. This pharmacological effect requires nicotinic acid doses that are much higher than those provided by a normal diet. Mediates nicotinic acid-induced apoptosis in mature neutrophils. Receptor activation by nicotinic acid results in reduced cAMP levels which may affect activity of cAMP-dependent protein kinase A and phosphorylation of target proteins, leading to neutrophil apoptosis. The rank order of potency for the displacement of nicotinic acid binding is 5-methyl pyrazole-3-carboxylic acid = pyridine-3-acetic acid > acifran > 5-methyl nicotinic acid = acipimox >> nicotinuric acid = nicotinamide.

Tissue specificity

Expression largely restricted to adipose tissue and spleen. Expressed on mature neutrophils but not on immature neutrophils or eosinophils.

Sequence similarities

Belongs to the G-protein coupled receptor 1 family.

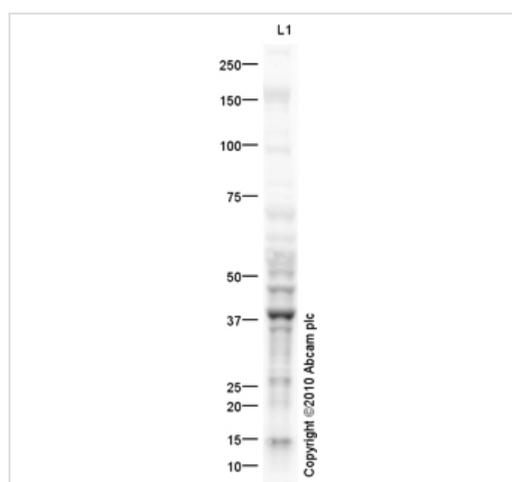
Developmental stage

Expression in neutrophils occurs in the late terminal differentiation phase.

Cellular localization

Cell membrane.

Images



Western blot - Anti-Puma gamma/GPR109A antibody (ab81825)

Anti-Puma gamma/GPR109A antibody (ab81825) at 1 µg/ml + Human liver tissue lysate - total protein (ab29889) at 10 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

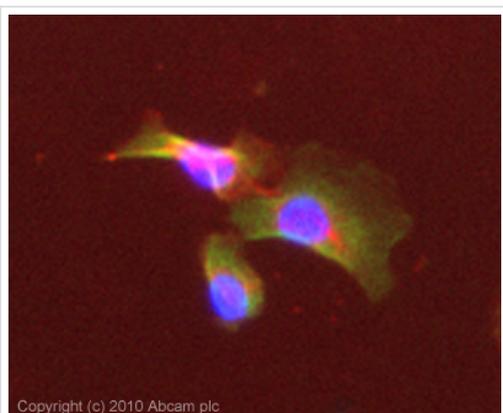
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 41 kDa

Observed band size: 41 kDa

Exposure time: 12 minutes



Immunocytochemistry/ Immunofluorescence - Anti-Puma gamma/GPR109A antibody (ab81825)

ICC/IF image of ab81825 stained MCF7 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab81825, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 rabbit anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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