GPR120 (H-10): sc-390752

BACKGROUND

GPR120, a member of the rhodopsin family of G protein-coupled receptors (GPCRs), is a 377 amino acid protein which is expressed in the intestine. GPR120 is a receptor for unsaturated long-chain FFAs (free fatty acids). FFAs act as signaling molecules and are an important energy source. They also employ various physiological responses through their GPCRs. One such response occurs when dietary FFAs stimulate GPR120. This stimulation promotes the secretion of glucagon-like peptide 1 (GLP-1) in vivo and in vitro. GLP-1 belongs to the class of molecules known as the incretins, which are associated with insulin secreted from the pancreas as a result of food intake. GLP-1 also inhibits glucagon and gastric acid secretion and gastric emptying. Consequently, the role of GPR120 in the secretion of GLP-1 is critical in the treatment of diabetes.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: FFAR4 (human) mapping to 10q23.33; Ffar4 (mouse) mapping to 19 C2.

SOURCE

GPR120 (H-10) is a mouse monoclonal antibody raised against amino acids 78-232 mapping at the C-terminus of GPR120 of human origin.

PRODUCT

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

GPR120 (H-10) is available conjugated to agarose (sc-390752 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390752 HRP), 200 µg/ml for WB, (HCIP) and ELISA; to either phycoerythrin (sc-390752 PE), fluorescein (sc-390752 FITC), Alexa Fluor® 488 (sc-390752 AF488), Alexa Fluor® 546 (sc-390752 AF546), Alexa Fluor® 594 (sc-390752 AF594) or Alexa Fluor® 647 (sc-390752 AF647), 200 µg/ml for WB (RGB), IF, (HCIP) and FCM; and to either Alexa Fluor® 680 (sc-390752 AF680) or Alexa Fluor® 790 (sc-390752 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM. Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

GPR120 (H-10) is recommended for detection of GPR120 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for GPR120 siRNA (h): sc-60737, GPR120 siRNA (m): sc-60738, GPR120 shRNA Plasmid (h): sc-60737-SH, GPR120 shRNA Plasmid (m): sc-60738-SH, GPR120 shRNA (h) Lentiviral Particles: sc-60737-V and GPR120 shRNA (m) Lentiviral Particles: sc-60738-V.

Molecular Weight (predicted) of GPR120: 42 kDa.

Molecular Weight (observed) of GPR120: 52 kDa.

Positive Controls: Hela whole cell lysate: sc-2200, DU 145 cell lysate: sc-2268 or KNRK whole cell lysate: sc-2214.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

DATA

GPR120 (H-10): sc-390752. Western blot analysis of GPR120 expression in Hela (A) and DU 145 (B) whole cell lysates.

GPR120 (H-10): sc-390752. Western blot analysis of GPR120 expression in KNRK whole cell lysate.

SELECT PRODUCT CITATIONS


STORAGE

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.