
GPBAR1 Antibody Blocking Peptide

Catalog Number: bs-8874P

Activity: Not tested

Purification: HPLC

Storage: Shipped at 4°C. Stored at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: The G protein-coupled receptor TGR5 is a 330-amino acid protein that is almost universally expressed in human tissues including heart, skeletal muscle, spleen, kidney, liver, small intestine, placenta, and leukocytes, but not in brain, colon (without mucosa), thymus, or lung. TGR5 is sensitive to bile acids and responds through a significant mechanism that coordinates energy homeostasis. Bile acids activate mitogen-activated protein (MAP) kinase pathways, specifically induce TGR5 internalization, promote an increase of guanosine 5'-O-3-thio-triphosphate binding in membrane fractions, and cause rapid intracellular cAMP production. Bile acids also provoke TGR5 to suppress macrophage functions. TGR5-controlled signaling pathways may be good candidates for drug targets to treat common metabolic diseases, such as obesity, type II diabetes, hyperlipidemia, and atherosclerosis.