

GPR55 Rabbit pAb

Catalog # AP97159

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q9Y2T6
Other Accession	Q9Y2T6
Reactivity	Rat, Human, Mouse
Predicted	Rabbit, Chicken, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36637
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GPR55
Epitope Specificity	141-240/319
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the G-protein coupled receptor 1 family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	G protein-coupled receptors (GPCRs, or GPRs) contain 7 transmembrane domains and transduce extracellular signals through heterotrimeric G proteins. GPCR GPR55 is a member of this family (subfamily Orphan-A). It has been reported to be expressed in the brain, where mRNA transcripts were detected in the caudate nucleus and putamen, but not detected in the hippocampus, thalamus, pons cerebellum, frontal cortex of the brain. ESTs have been isolated from liver/spleen libraries.

Additional Information

Gene ID	9290
Other Names	LPIR1; GPR55_HUMAN; GPR55; G protein-coupled receptor 55
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=2ug /Test
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	GPR55
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Function	G protein-coupled receptor that binds to several ligands including 2-arachidonoyl lysophosphatidylinositol or lysophosphatidylglucoside with high affinity, leading to rapid and transient activation of numerous intracellular signaling pathways (PubMed: 36142844 , PubMed: 36523570 , PubMed: 37544935). Induces the Ca(2+) release from intracellular stores via ERK, the heterotrimeric G protein GNA13 and RHOA leading to morphological changes including cell rounding and stress fiber formation (PubMed: 36142844). In macrophages, acts downstream of lysophosphatidylglucoside to inhibit the translocation of the phospholipid-transporting ABCA1 to plasma membrane and subsequent cholesterol efflux leading to lipid accumulation and foam cell formation (PubMed: 37544935).
Cellular Location	Cell membrane; Multi-pass membrane protein
Tissue Location	Expressed in the caudate nucleus and putamen, but not detected in the hippocampus, thalamus, pons cerebellum, frontal cortex of the brain or in the liver. Expressed in osteoclasts and osteoblasts. Highly expressed in macrophages and B-cells (PubMed: 36523570 , PubMed: 37544935).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.