

GPR55 Antibody (Extracellular Domain)
Rabbit Polyclonal Antibody
Catalog # ALS10881**Specification**

GPR55 Antibody (Extracellular Domain) - Product Information

Application	IHC-P
Primary Accession	O9Y2T6
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37kDa KDa
Dilution	IHC-P~~N/A

GPR55 Antibody (Extracellular Domain) - Additional Information**Gene ID** 9290**Other Names**

G-protein coupled receptor 55, GPR55

Target/Specificity

Human GPR55. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage

Long term: -70°C; Short term: +4°C

Precautions

GPR55 Antibody (Extracellular Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

GPR55 Antibody (Extracellular Domain) - Protein Information**Name** GPR55**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

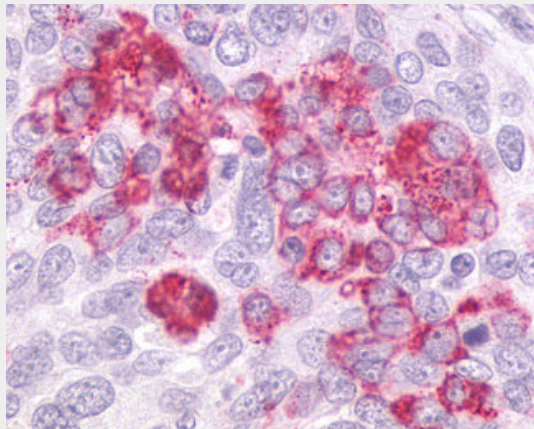
Expressed in the caudate nucleus and putamen, but not detected in the hippocampus, thalamus, pons cerebellum, frontal cortex of the brain or in the liver. Expressed in osteoclasts and osteoblasts. Highly expressed in macrophages and B-cells (PubMed:36523570, PubMed:37544935).

GPR55 Antibody (Extracellular Domain) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

GPR55 Antibody (Extracellular Domain) - Images



Anti-GPR55 antibody IHC of human Ovary, Carcinoma.

GPR55 Antibody (Extracellular Domain) - Background

May be involved in hyperalgesia associated with inflammatory and neuropathic pain (By similarity). Receptor for L- alpha-lysophosphatidylinositol (LPI). LPI induces Ca^{2+} release from intracellular stores via the heterotrimeric G protein GNA13 and RHOA. Putative cannabinoid receptor. May play a role in bone physiology by regulating osteoclast number and function.

GPR55 Antibody (Extracellular Domain) - References

Sawzdargo M., et al. Brain Res. Mol. Brain Res. 64:193-198(1999).
Ebert L., et al. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Oka S., et al. Biochem. Biophys. Res. Commun. 362:928-934(2007).

Henstridge C.M.,et al.FASEB J. 23:183-193(2009).
Kapur A.,et al.J. Biol. Chem. 284:29817-29827(2009).