## bs-13535R

# [ Primary Antibody ]

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# DATASHEET -

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

**GPR40 Rabbit pAb** 

**GenelD: 2864 SWISS:** 014842

Target: GPR40

Immunogen: KLH conjugated synthetic peptide derived from human GPR40:

121-220/300. < Extracellular >

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50%

Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated

freeze/thaw cycles.

**Background:** G protein coupled receptors provide attractive targets for drug therapy due to the sheer size and diversity of ligands within this receptor family. G protein-coupled receptor 40 (GPR40) functions as a cell-surface receptor for long-chain free fatty acids (FFAs). FFAs provide an important energy source, but also function as signaling molecules in various pathways, notably the process of insulin secretion. In pancreatic tissue, the interaction of long chain FFAs with GPR40 amplifies glucose-stimulated insulin secretion from beta cells, suggesting a possible role for GPR40 in the treatment of diabetes associated with insulin-deficiency. Specifically, the Arg211His polymorphism in the GPR40 gene may contribute to the variation of insulin secretory capacity in Japanese men. Also, GPR40 may be involved in the control of breast cancer cell growth by fatty acids and, therefore, provide a link between fat and cancer.

Applications: IHC-P (1:100-500)

IHC-F (1:100-500) **IF** (1:100-500)

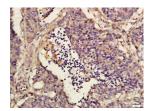
Reactivity: Human (predicted: Mouse,

Rat, Pig, Dog)

**Predicted** MW.:

Subcellular Location: Cell membrane

### VALIDATION IMAGES



Tissue/cell: human lung carcinoma: 4% Paraformaldehyde-fixed and paraffinembedded; Antigen retrieval: citrate buffer ( 0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Incubation: Anti-GPR40 Polyclonal Antibody, Unconjugated(bs-13535R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

## — SELECTED CITATIONS -

• [IF=4.8] Xiaoyu Zhu. et al. Chaihu Guizhi Decoction Prevents Cognitive, Memory Impairments and Sensorimotor Gating Deficit Induced by N-methyl-d-aspartate Receptor Antibody in Mice. J ETHNOPHARMACOL. 2024 Sep;:118806 WB

