bs-13536R **[Primary Antibody]**

GPR43 Rabbit pAb

www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 2867 **SWISS:** O15552

Target: GPR43

Immunogen: KLH conjugated synthetic peptide derived from human GPR43: 41-140/330. < 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 (GPR) GPR41 and GPR43 are related members of a homologous family of orphan G protein-coupled receptors that are tandemly encoded at a single chromosomal locus in both humans and mice. GPR43 functions as a ligand for short chain fatty acids (SCFAs), notably acetate and propionate. Bacteria in the gut produce high concentrations of SCFAs, which are subsequently released in the bloodstream, where they exert cellular effects on blood leukocytes, including calcium release, ERK1/2 activation, and inhibition of cAMP accumulation. These effects indicate a role for GPR43 in the recruitment of leukocytes, particularly polymorphonuclear cells, to sites of bacterial infection.

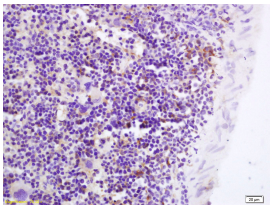
Applications: **IHC-P** (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
ICC/IF (1:100)

Reactivity: Human, Mouse (predicted: Rat)

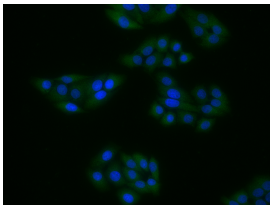
Predicted MW.: 37 kDa

Subcellular Location: Cell membrane

VALIDATION IMAGES



Tissue/cell: mouse spleen tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; 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-GPR43 Polyclonal Antibody, Unconjugated(bs-13536R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



MCF7 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (GPR43) polyclonal Antibody, Unconjugated (bs-13536R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.

SELECTED CITATIONS

- **[IF=17.694]** Niu, Junling. et al. Microbiota-derived acetate enhances host antiviral response via NLRP3. NAT COMMUN. 2023 Feb;14(1):1-17 ICC ;Mouse. 36746963
- **[IF=8.739]** Gang Tang. et al. Butyrate ameliorate skeletal muscle atrophy in Diabetic Nephropathy via enhancing gut

barrier function and FFA2-mediated PI3K/AKT/mTOR signals. 2021 Oct 12 WB,IHC ;Mouse. 34638162

- **[IF=8.74]** Yao Yao. et al. Short-chain fatty acids regulate B cells differentiation via FFAR2 to alleviate rheumatoid arthritis. BRIT J PHARMACOL. 2022 Apr 07 FCM ;Mouse. 35393660
- **[IF=8.063]** Hu ZB et al. Dysbiosis of intestinal microbiota mediates tubulointerstitial injury in diabetic nephropathy via the disruption of cholesterol homeostasis. Theranostics. 2020 Feb 3;10(6):2803-2816. IHC,IF ;rat. 32194836
- **[IF=7.129]** Kaidong Wang. et al. Gut dysfunction may be the source of pathological aggregation of alpha-synuclein in the central nervous system through Paraquat exposure in mice. ECOTOX ENVIRON SAFE. 2022 Nov;246:114152 WB ;Mouse. 36201918