Data Sheet (Cat.No.TMAB-00795)

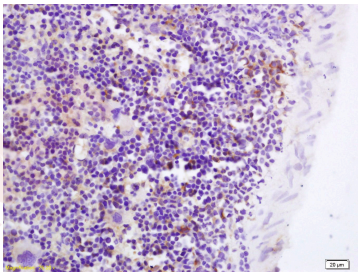
Anti-GPR43 Polyclonal Antibody

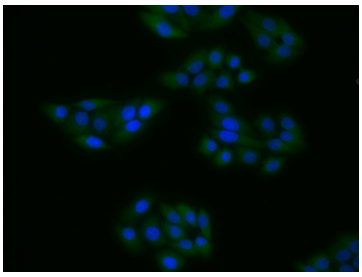
Product Details

Ig Type:	IgG
Reactivity:	Human,Mouse (predicted:Rat)
Molecular Weight:	Theoretical: 37 kDa.
Purification:	Protein A purified

Applications

Verified Activity:	1. Tissue/cell: mouse spleen tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH6.0), Boiling bathing for 15 min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30 min; Blocking buffer (normal goat serum) at 37°C for 20 min; Incubation: Anti-GPR43 Polyclonal Antibody, Unconjugated (TMAB-00795) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody and DAb staining. 2. MCF7 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum) at 37°C for 20 min; Antibody incubation with (GPR43) polyclonal Antibody, Unconjugated (TMAB-00795) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue) was used to stain the cell nucleus.





Application:	ICC/IF,IF,IHC-Fr,IHC-P
Recommended	ICC/IF=1:100-500; IF=1:100-500; IHC-Fr=1:100-500; IHC-P=1:100-500

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	KLH conjugated synthetic peptide: human GPR43
Antigen Species:	Human
Gene ID:	2867
Uniprot ID:	O15552
Synonyms:	GPR 43;GPCR GPR43;FFA2R;GPCR 43;FFAR2;free fatty acid activated receptor 2;G protein coupled receptor 43;Free fatty acid receptor 2
Biology Area:	GPCR

Research 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.

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