10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-GPR15 Antibody

Catalog # AP51956

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P49685
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40787

Additional Information

Gene ID	2838
Other Names	G-protein coupled receptor 15; Brother of Bonzo; BoB
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human GPR15. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

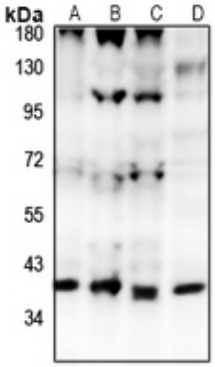
Name	GPR15
Function	G protein-coupled receptor that plays an important role in immune homeostasis (PubMed:33758080, PubMed:38918398). Acts via its natural ligand GPR15LG, a chemokine-like polypeptide strongly expressed in gastrointestinal tissues. GPR15-GPR15LG signaling axis regulates intestinal homeostasis and inflammation through the migration of immune cells (PubMed:33758080, PubMed:38918398). Controls thereby the specific homing of T-cells, particularly FOXP3+ regulatory T-cells (Tregs), to the large intestine lamina propria (By similarity). Also required for skin localization of thymus-derived dendritic epidermal T-cells (By similarity). Plays an important role in mediating cytoprotective function as well as angiogenesis of thrombomodulin (By similarity). Mechanistically, preferentially signals through the Gi/o pathway to inhibit adenylate cyclase activity and activate a phosphatidylinositol- calcium second messenger system that regulates the release of Ca(2+) ions from intracellular stores (PubMed:35510660).
Cellular Location	Cell membrane; Multi-pass membrane protein

Tissue Location	Highly expressed in lymphoid tissues, including macrophages and peripheral blood mononuclear cells

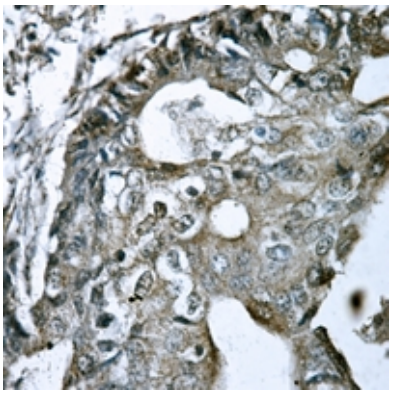
References

Heiber M.,et al.Genomics 32:462-465(1996).

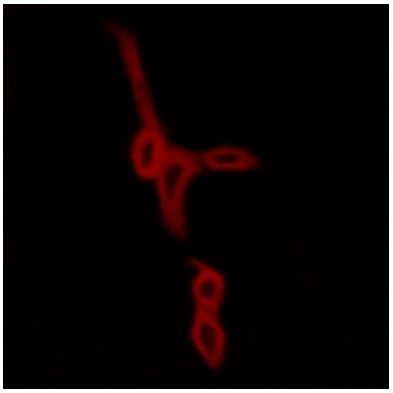
Images



Western blot analysis of GPR15 expression in Hela (A), SG7901 (B), PC12 (C), mouse uterus (D) whole cell lysates. (Predicted band size: 40 kD; Observed band size: 40 kD)



Immunohistochemical analysis of GPR15 staining in human colorectal cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of GPR15 staining in LOVO cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

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