

## Product datasheet for UM800104CF

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

### LGR5 Mouse Monoclonal Antibody [Clone ID: UMAB212]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: UMAB212

**Applications:** 10k-ChIP, FC, IF, IHC, WB

Recommended Dilution: WB 1:1000~2000, IHC 1:100~150 (recommended antigen retrieval buffer: TEE buffer pH 9.0),

IF 1:100, FLOW 1:100

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG2a

Clonality: Monoclonal

**Immunogen:** Human recombinant protein fragment corresponding to amino acids 22-543 of human LGR5

(NP\_003658) produced in HEK293 cell.

**Formulation:** Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

**Reconstitution Method:** For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Predicted Protein Size:** 99.8 kDa

**Gene Name:** leucine rich repeat containing G protein-coupled receptor 5

Database Link: NP 003658

Entrez Gene 14160 MouseEntrez Gene 299802 RatEntrez Gene 8549 Human

<u>075473</u>

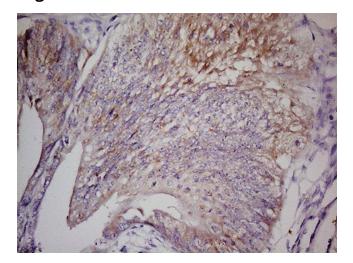
**Synonyms:** FEX; GPR49; GPR67; GRP49; HG38



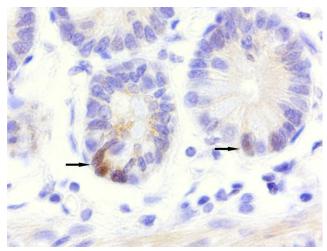


**Protein Families:** Druggable Genome, GPCR, Transmembrane

# **Product images:**

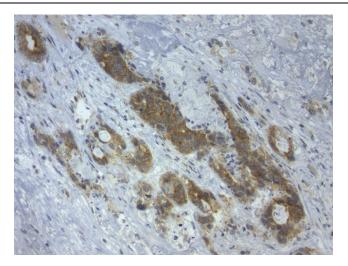


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human colon tissue using anti-LGR5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 110°C for 10min, [UM800104]) (1:150)

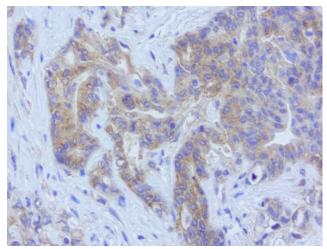


Immunohistochemical staining of paraffinembedded human small intestine using anti-LGR5 clone UMAB212 mouse monoclonal antibody used at 1ug/mL dilution and detection with Polink2 Broad HRP DAB. [UM800104] requires heat-induced epitope retrieval with TEE pH 9.0 at 95-100C 20 minutes. The image shows two arrows pointing to strong and weak staining of small intestine stem cells.

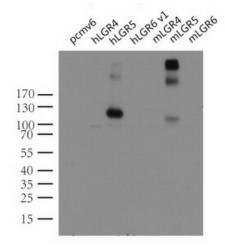




Immunohistochemical staining of paraffinembedded human colon cancer using mouse anti-LGR5 clone UMAB212 ([UM800104]) at 1:400 with GBI Polink2 Broad HRP DAB detection kit ([D22-110]); pretreatment of tissue prior to stain with heat-induced epitope retrieval buffer from GBI Labs TEE pH 9.0 ([B21-100])using pressure chamber for 3 minutes at 110C is required for optimal staining. Shown here strong cytoplamic tumor cells.

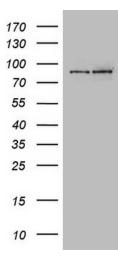


Immunohistochemical staining of paraffinembedded human gastric cancer using mouse anti-LGR5 clone UMAB212 ([UM800104]) at 1:400 with GBI Polink2 Broad HRP DAB detection kit ([D22-110]); pretreatment of tissue prior to stain with heat-induced epitope retrieval buffer from GBI Labs TEE pH 9.0 ([B21-100]) using pressure chamber for 3 minutes at 110C is required for optimal staining. Shown here strong cytoplamic tumor cells.

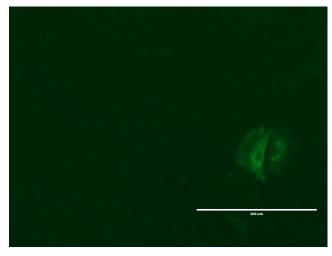


Western blot analysis of extracts (10ug) from 7 different transiently transfected HEK293T cell lysates by using anti-LGR5 monoclonal antibody (Cat# [UM800104]). Lanes: control vector pCMV6-Entry (Cat# [PS100001]); human LGR4 (Cat# [RC221345]), LGR5 (Cat# [RC212825]) and LGR6 (Cat# [RC219284]), and mouse LGR4 (Cat# [MR219497]), LGR5 (Cat#[MR219702]) and LGR6 (Cat# [MR224646]).

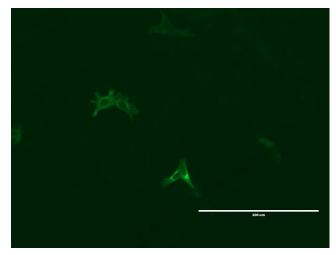




Western blot analysis of extracts (15ug) from 2 Human tissue by using anti-LGR5 monoclonal antibody (left lane: Brain right lane: Testis) (1:2000).

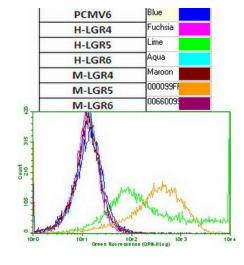


Anti-LGR5 mouse monoclonal antibody ([UM800104])immunofluorescent staining of MCF7 cells transiently transfected by pCMV6-ENTRY human LGR5 ([RC212825]) (1:100).

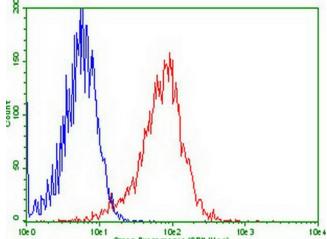


Anti-LGR5 mouse monoclonal antibody ([UM800104]) immunofluorescent staining of MCF7 cells transiently transfected by pCMV6-ENTRY mouse LGR5 ([MR219702]) (1:100).

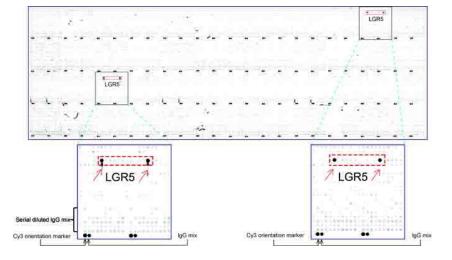




Flow cytometric analysis of HEK293T cells transiently transfected with human LGR4 ([RC221345]) or mouse LGR4 ([MR219497]), human LGR5 ([RC212825]) or mouse LGR5 ([MR219702]), human LGR6 ([RC219284]) or mouse LGR6 ([MR224646]), or control vector pCMV6-Entry ([PS100001]), using anti-LGR5 antibody ([UM800104], 1:100) surface stained on live cells.



Flow cytometric analysis of stable expression LGR5 ([RC212825]) HEK293T cells (Red) compared to negative control HEK293T cells (Blue) using anti-LGR5 antibody ([UM800104], 1:100) surface stained on live cells.



OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-LGR5 mouse monoclonal antibody ([UM800104]) at 1:100. The positive reactive proteins are highlighted with two red arrows in the enlarged subarray. All the positive controls spotted in this subarray are also labeled for clarification.