

**Name: LGR5 mouse monoclonal antibody, clone OT12A2**  
**Product Data Sheet - TRUEMAB**

Catalog: TA503316

<b>Components:</b>	• LGR5 mouse monoclonal antibody, clone OT12A2 (TA503316)
<b>Amount:</b>	100ul
<b>Immunogen:</b>	Human recombinant protein fragment corresponding to amino acids 250-550 of human LGR5 (NP_003658) produced in HEK293T Cell.
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG1
<b>Species Reactivity:</b>	Human, Mouse
<b>Guaranteed Applications:</b>	IHC, WB, IP, IF, FC
<b>Suggested Dilutions:</b>	WB 1:2000, IHC 1:150, IF 1:100, FLOW 1:100, IP 2ug/500ul
<b>Concentration:</b>	1 mg/ml
<b>Buffer:</b>	PBS (PH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
<b>Purification:</b>	Purified from mouse ascites fluids by affinity chromatography
<b>Storage Condition:</b>	Shipped at -20C or with ice packs. Upon delivery store at -20C. Dilute in PBS (pH7.3) if necessary. Stable for 12 months from date of receipt. Avoid repeated freeze-thaws.

## Target

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<b>Target Name:</b>	Homo sapiens leucine rich repeat containing G protein-coupled receptor 5 (LGR5), transcript variant 1
<b>Alternative Name:</b>	FEX; GPR49; GPR67; GRP49; HG38
<b>Database Link:</b>	<a href="#">NP_003658</a> <a href="#">Entrez Gene 8549 Human</a> <a href="#">Entrez Gene 14160 Mouse</a>

*This product is to be used for laboratory only. Not for diagnostic or therapeutic use.*

## Validation Data

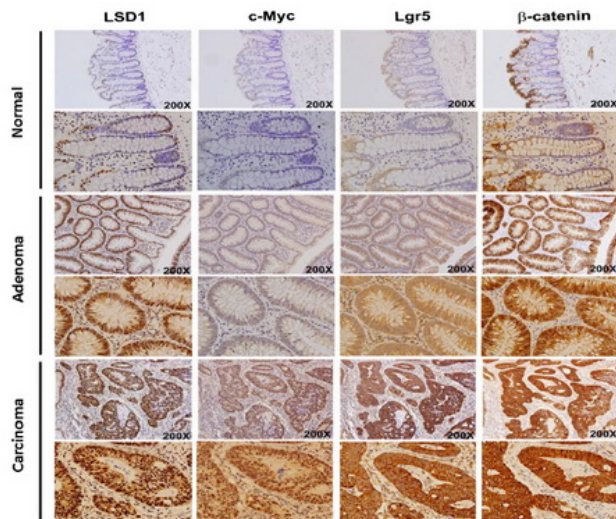


Figure from citation: Positive correlation between LSD1, c-Myc, β-catenin and LGR5 expression in human colorectal tumor tissues. Expression levels of LSD1, LGR5, β-catenin and c-Myc in consecutive sections from normal colon, adenoma and CRC tumor tissues.

Dilution: 1:100 <a

href='http://www.ncbi.nlm.nih.gov/pubmed/25060070' target='\_blank'>View Citation</a>

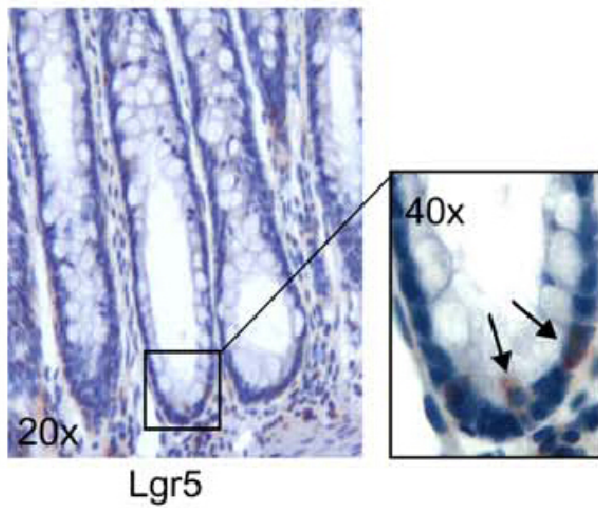


Figure from citation: Immunohistochemical analysis of Lgr5 expression in human normal colon biopsies; Lgr5+ cells are localized at the crypt base, where bona fide stem-like cells home; magnification is indicated in the boxes. Dilution: 1:200 <a

href='http://www.ncbi.nlm.nih.gov/pubmed/22927961' target='\_blank'>View Citation</a>

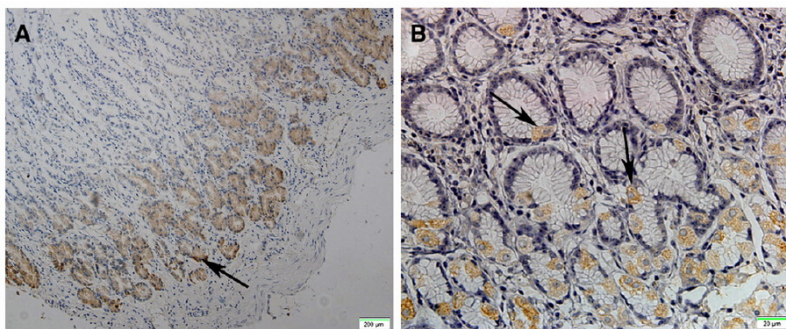
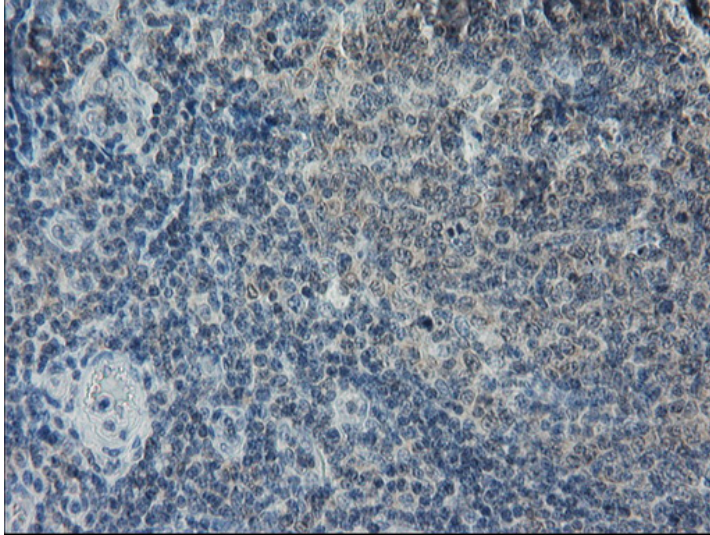
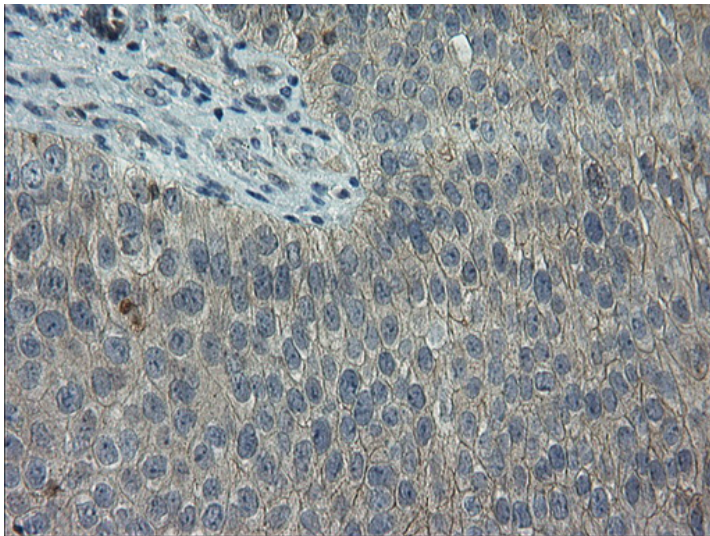


Figure from citation: Immunohistochemical staining of Lgr5 in normal gastric tissues. The normal gastric tissue, 40x magnified (A) and 400x magnified (B). Yellow spots represent the Lgr5 positive cells that are localized only at base of the glands in normal gastric mucosa. The arrows in the pictures show the immunoreactive cells stained in yellow color. <a

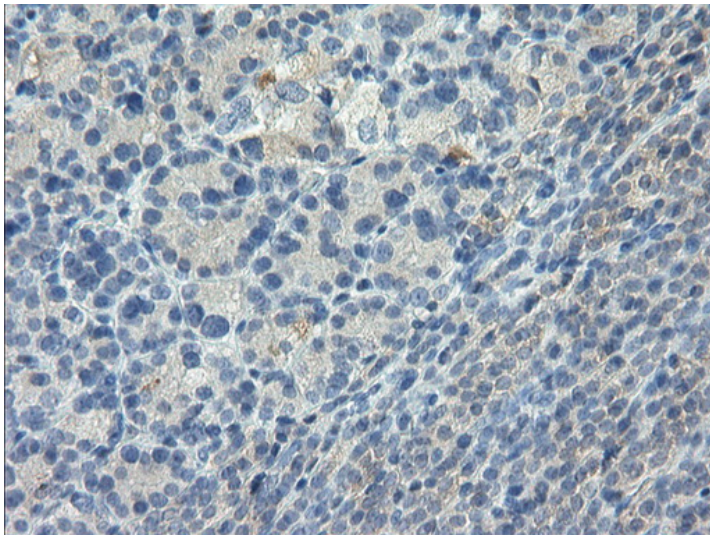
href='http://www.ncbi.nlm.nih.gov/pubmed/23664892' target='\_blank'>View Citation</a>



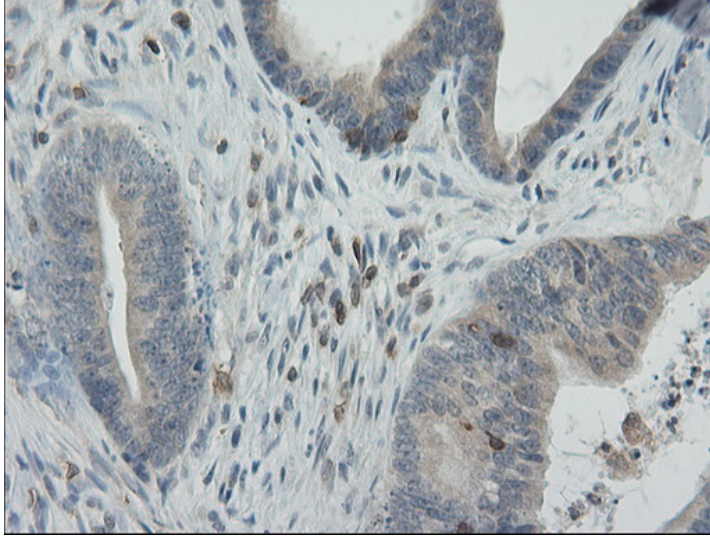
Immunohistochemical staining of paraffin-embedded Human lymph node tissue within the normal limits using anti-LGR5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100C for 10min, TA503316)



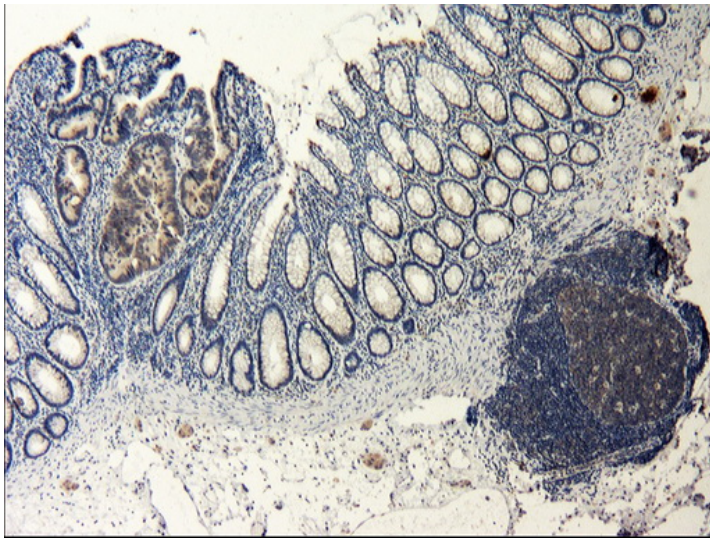
Immunohistochemical staining of paraffin-embedded Carcinoma of Human bladder tissue using anti-LGR5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100C for 10min, TA503316)



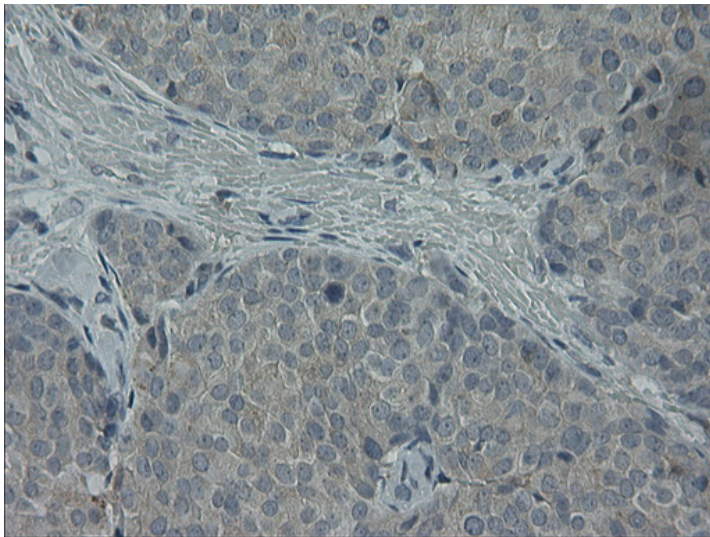
Immunohistochemical staining of paraffin-embedded Carcinoma of Human thyroid tissue using anti-LGR5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100C for 10min, TA503316)



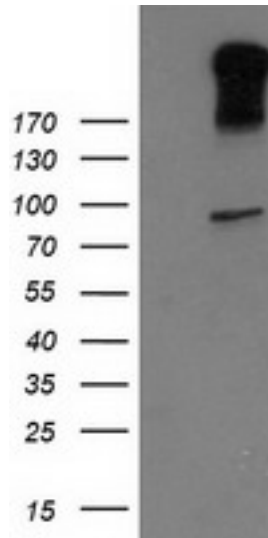
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human colon tissue using anti-LGR5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100C for 10min, TA503316)



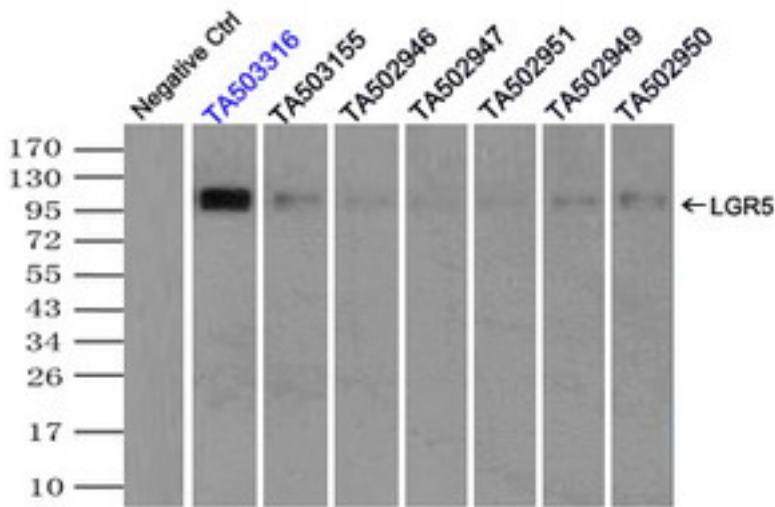
Immunohistochemical staining of paraffin-embedded Human colon tissue within the normal limits using anti-LGR5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100C for 10min, TA503316)



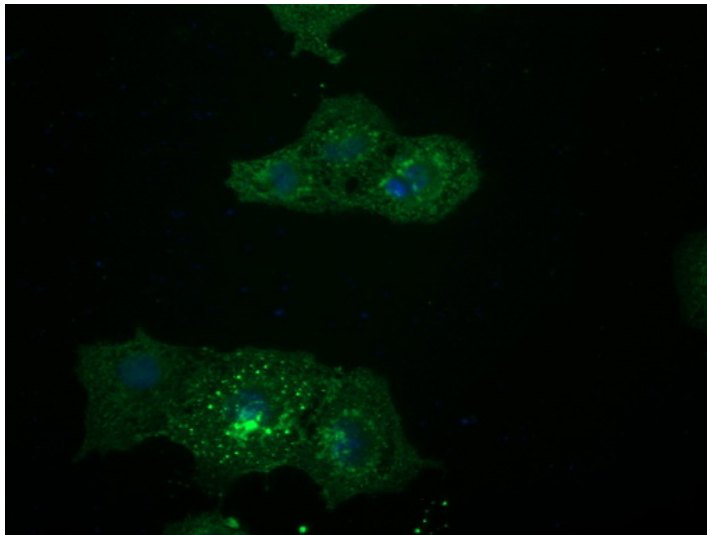
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human breast tissue using anti-LGR5 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100C for 10min, TA503316)



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY LGR5 (RC212825, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-LGR5.



Immunoprecipitation(IP) of LGR5 by using TrueMab monoclonal anti-LGR5 antibodies (Negative control: IP without adding anti-LGR5 antibody.). For each experiment, 500ul of DDK tagged LGR5 overexpression lysates (at 1:5 dilution with HEK293T lysate), 2ug of anti-LGR5 antibody and 20ul (0.1mg) of goat anti-mouse conjugated magnetic beads were mixed and incubated overnight. After extensive wash to remove any non-specific binding, the immuno-precipitated products were analyzed with rabbit anti-DDK polyclonal antibody.



Anti-LGR5 mouse monoclonal antibody (TA503316) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY LGR5(RC212825).

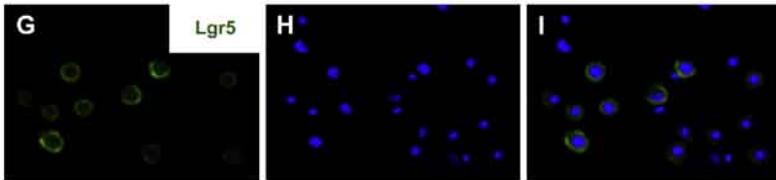
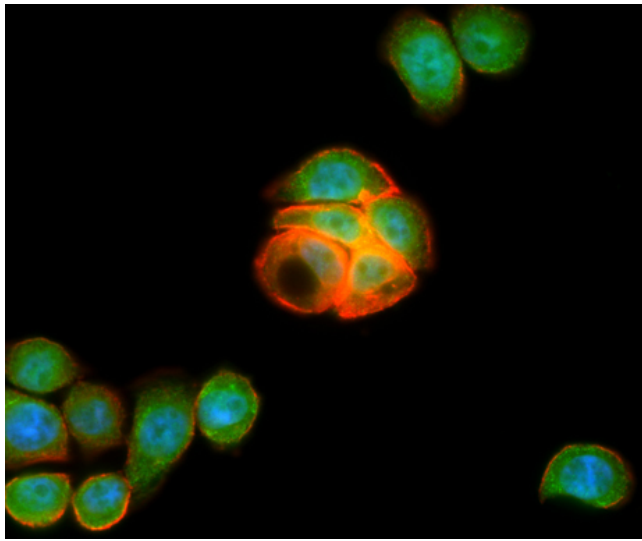
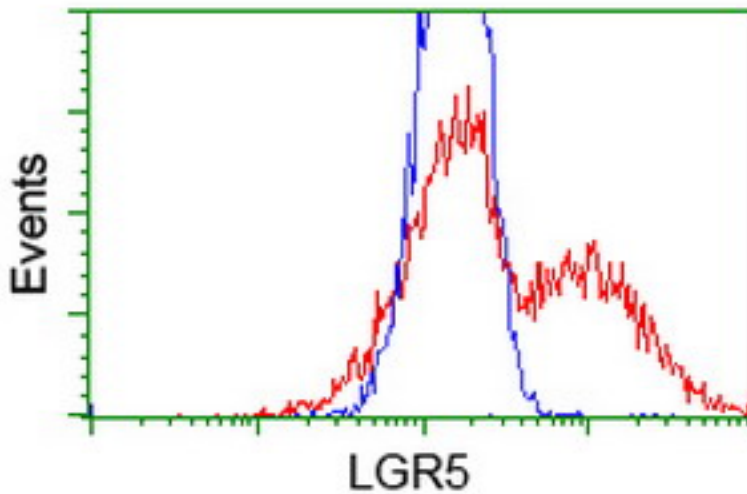


Figure from citation: Immunocytochemistry of epithelium stem cell phenotype. Isolated dental epithelium following 5-day culture, overwhelmingly expressed Lgr5. Dilution: 1:100 <a href='http://www.ncbi.nlm.nih.gov/pubmed/24345734' target='\_blank'>View Citation</a>



Immunofluorescent staining of HT29 cells using anti-LGR5 mouse monoclonal antibody (TA503316, green). Actin filaments were labeled with TRITC-phalloidin (red), and nuclear with DAPI (blue).



HEK293T cells transfected with either RC212825 overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-LGR5 antibody (TA503316), and then analyzed by flow cytometry.

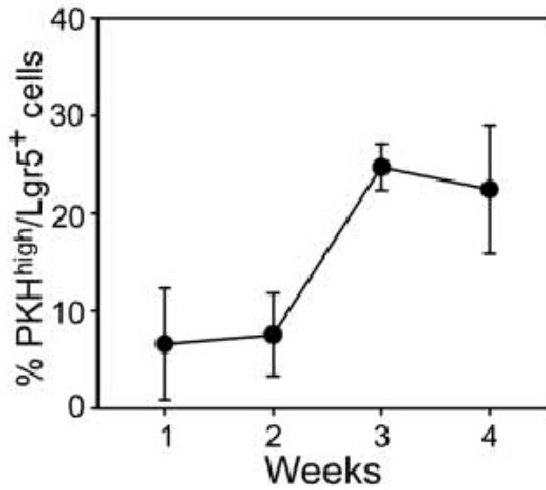


Figure from citation: Cytofluorimetric analysis of Lgr5 expression by PKH high cells over 4 weeks of culture. Data are expressed as percent mean values (6 SD) of 5 consecutive experiments. Dilution: 1:400 <a href='http://www.ncbi.nlm.nih.gov/pubmed/22927961' target='\_blank'>View Citation</a>

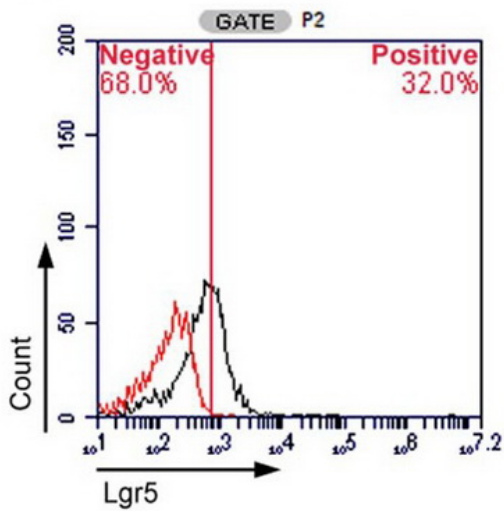


Figure from citation: Flow cytometry of the SB cells. The G4 region was further divided into P1 and P2. Lgr5, a stem cell marker, was expressed by 32% of the P2 population. Black: staining with Lgr5; red: staining with the isotype control. <a href='http://www.ncbi.nlm.nih.gov/pubmed/24465489' target='\_blank'>View Citation</a>

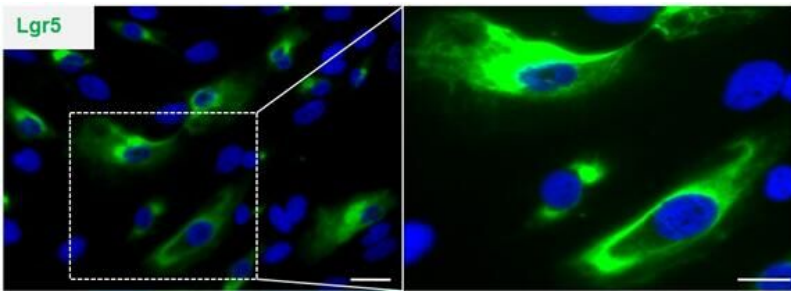


Figure from citation: [Nature] Cells expressing the stem cell marker Lgr5 was detected by immunostaining of hCECs in 2D culture. <a href='https://www.ncbi.nlm.nih.gov/pubmed/27398792' target='\_blank'>View Citation</a><br />Pubmed id: 27398792<br />Memo: Human; IF

***This product is to be used for laboratory only. Not for diagnostic or therapeutic use.***

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