

Rabbit LGR5/GPR49 Polyclonal Antibody | anti-LGR5 antibody

LGR5/GPR49 Antibody (loop2)

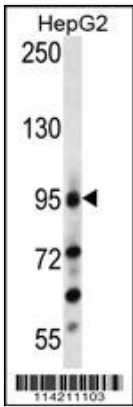
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA28712	Rabbit	Human, mouse, rat	Western Blot, ELISA, Immunofluorescence, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

LGR5/GPR49; Polyclonal Antibody; LGR5/GPR49 Antibody (loop2); Leucine-rich repeat-containing G-protein coupled receptor 5; G-protein coupled receptor 49; G-protein coupled receptor 67; G-protein coupled receptor HG38; LGR5; GPR49; GPR67; anti-LGR5 antibody

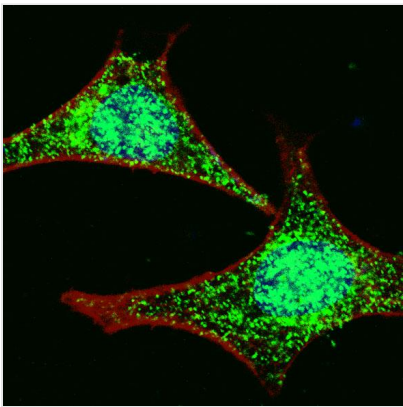
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, mouse, rat
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This LGR5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 689-719 amino acids from human LGR5.
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Concentration	Vial Concentration: 0.5 (varies by lot)
Sequence Positions	689-719
Sequence Length	835
Applicable Applications for anti-LGR5 antibody	WB (Western Blot), ELISA, IF (Immunofluorescence), FCM/FACS (Flow Cytometry)
Application Notes	WB~~1:1000
Antigen Type	Synthetic Peptide
Crown Antibody	Yes
Antigen Source	HUMAN
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.



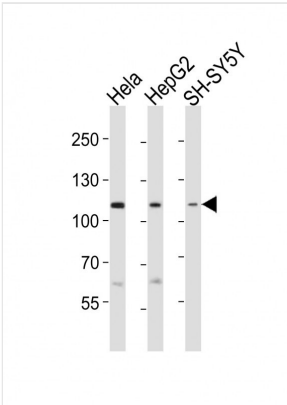
IF (Immunofluorescence)

LGR5/GPR49 Antibody (loop2) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the LGR5/GPR49 antibody detected the LGR5/GPR49 protein (arrow).



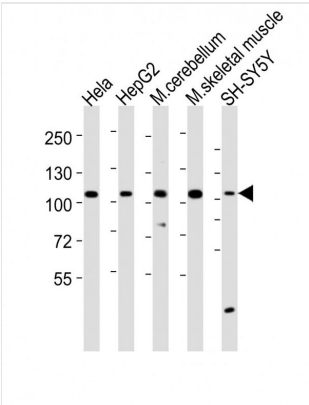
IF (Immunofluorescence)

Fluorescent confocal image of HeLa cells stained with LGR5/GPR49 (loop2) antibody. HeLa cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min). Cells were then incubated with AAA28712 LGR5 (loop2) primary antibody (1:100, 2 h at room temperature). For secondary antibody, Alexa Fluor 488 conjugated donkey anti-rabbit antibody (green) was used (1:1000, 1h). Nuclei were counterstained with Hoechst 33342 (blue) (10 ug/ml, 5 min). Note the highly specific localization of the LGR5 immunosignal to the nucleus and cytoplasm, supported by Human Protein Atlas Data (<http://www.proteinatlas.org/ENSG00000139292>).



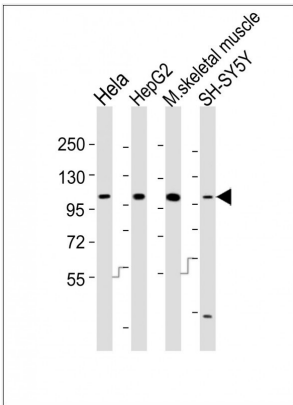
WB (Western Blot)

Western blot analysis of lysates from HeLa, HepG2, SH-SY5Y cell line (from left to right), using LGR5/GPR49 Antibody (loop2). AAA28712 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L (HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.



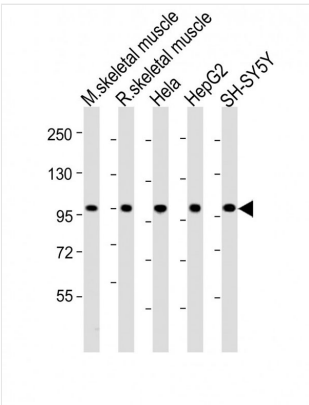
WB (Western Blot)

All lanes : Anti-LGR5 Antibody (loop2) at 1:2000 dilution
Lane 1: HeLa whole cell lysates
Lane 2: HepG2 whole cell lysates
Lane 3: mouse cerebellum lysates
Lane 4: mouse skeletal muscle lysates
Lane 5: SH-SY5Y whole cell lysates
Lysates/proteins at 20 ug per lane.
Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution
Predicted band size : 100 kDa
Blocking/Dilution buffer: 5% NFDM/TBST.



WB (Western Blot)

All lanes : Anti-LGR5 Antibody (loop2) at 1:2000 dilution
Lane 1: HeLa whole cell lysates
Lane 2: HepG2 whole cell lysates
Lane 3: mouse skeletal muscle lysates
Lane 4: SH-SY5Y whole cell lysates
Lysates/proteins at 20 ug per lane.
Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution
Predicted band size : 100 kDa
Blocking/Dilution buffer: 5% NFDM/TBST.



WB (Western Blot)

All lanes : Anti-LGR5 Antibody (loop2) at 1:2000 dilution
Lane 1: mouse skeletal muscle lysates
Lane 2: rat skeletal muscle lysates
Lane 3: HeLa whole cell lysates
Lane 4: HepG2 whole cell lysates
Lane 5: SH-SY5Y whole cell lysates
Lysates/proteins at 20 ug per lane.
Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution
Predicted band size : 100 kDa
Blocking/Dilution buffer: 5% NFDM/TBST.

ADDITIONAL INFORMATION

Related Product Information for anti-LGR5 antibody	LGR5/GPR49 is an orphan receptor. It may be an important receptor for signals controlling growth and differentiation of specific embryonic tissues. Stem cell marker of the intestinal epithelium and the hair follicle. Target gene of Wnt signaling. Expressed in skeletal muscle, placenta, spinal cord, and various region of brain. Expressed at the base of crypts in colonic and small mucosa stem cells. In premalignant cancer expression is not restricted to the crypt base. Overexpressed in cancers of the ovary, colon and liver.
Product Categories/Family for anti-LGR5 antibody	Crown Antibodies ; Cancer ; Signal Transduction ; Loading Control
References	References for protein: 1. Barker,N., Nature 449 (7165),1003-1007 (2007) 2. Hsu,S.Y., Mol. Endocrinol. 14 (8), 1257-1271 (2000). 3. Yamamoto Y., Sakamoto M., Fujii G., Tsuiji H., Kenetaka K., Asaka M., Hirohashi S. Overexpression of orphan G-protein-coupled receptor, Gpr49, in human hepatocellular carcinomas with beta-catenin mutations. Hepatology 37:528-533(2003). 4. McClanahan T., Koseoglu S., Smith K., Grein J., Gustafson E., Black S., Kirschmeier P., Samatar A.A. Identification of overexpression of orphan G protein-coupled receptor GPR49 in human colon and ovarian primary tumors. Cancer Biol. Ther. 5:419-426(2006). 6. Becker L., Huang Q., Mashimo H. Immunostaining of Lgr5, an intestinal stem cell marker, in normal and premalignant human gastrointestinal tissue. ScientificWorldJournal 8:1168-1176(2008) References for HeLa cell line: 1. Scherer WF, Syverton JT, Gey GO (May 1953). "Studies on the propagation in vitro of poliomyelitis viruses. IV. Viral multiplication in a stable strain of human malignant epithelial cells (strain HeLa) derived from an epidermoid carcinoma of the cervix". J. Exp. Med. 97 (5): 695-710. [PubMed:13052828]. 2. Macville M, Schröck E, Padilla-Nash H, Keck C, Ghadimi BM, Zimonjic D, Popescu N, Ried T (January 1999). "Comprehensive and definitive molecular cytogenetic characterization of HeLa cells by spectral karyotyping". Cancer Res. 59 (1): 141-50. [PubMed: 9892199]. 3. Rahbari R, Sheahan T, Modes V, Collier P, Macfarlane C, Badge RM (April 2009). "A novel L1 retrotransposon marker for HeLa cell line identification". BioTechniques 46 (4): 277-84. [PubMed: 19450234]. 4. Capes-Davis A, Theodosopoulos G, Atkin I, Drexler HG, Kohara A, MacLeod RA, Masters JR, Nakamura Y, Reid YA, Reddel RR, Freshney RI (July 2010). "Check your cultures! A list of cross-contaminated or misidentified cell lines". Int. J. Cancer 127 (1): 1-8. [PubMed:20143388].

NCBI AND UNIPROT INFORMATION

NCBI GI #	469608414
NCBI GeneID	8549
NCBI Accession #	NP_001264155.1 ; NP_003658.1
NCBI GenBank Nucleotide #	NM_001277226.1
UniProt Accession #	O75473 ; Q4VAM0 ; Q4VAM2 ; Q9UP75 ; D8MCT0
Molecular Weight	99998
NCBI Official Full Name	leucine-rich repeat-containing G-protein coupled receptor 5 isoform 2
NCBI Official Synonym Full Names	leucine-rich repeat containing G protein-coupled receptor 5
NCBI Official Symbol	LGR5
NCBI Official Synonym Symbols	FEX; HG38; GPR49; GPR67; GRP49
NCBI Protein Information	leucine-rich repeat-containing G-protein coupled receptor 5
UniProt Protein Name	Leucine-rich repeat-containing G-protein coupled receptor 5

UniProt Gene Name	LGR5
UniProt Synonym Gene Names	GPR49; GPR67
UniProt Entry Name	LGR5_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/lgr5-gpr49-antibody-western-blot-immunofluorescence-flow-cytometry-elisa/28712>