

Rat LGR5 (GPR49) Monoclonal Antibody | anti-LGR5 antibody

Rat anti-human LGR5 (GPR49) monoclonal antibody

CATALOG # AAA71492	HOST Rat	APPLICATIONS ELISA, Flow Cytometry, Functional Assay
------------------------------	--------------------	--

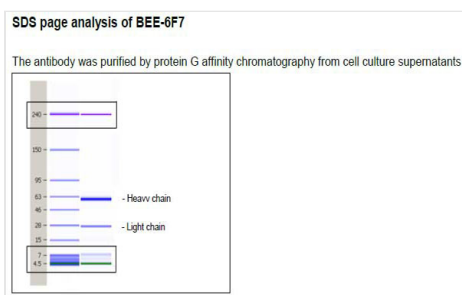
PRODUCT SYNONYMS

LGR5 (GPR49); Monoclonal Antibody; Rat anti-human LGR5 (GPR49) monoclonal antibody; anti-LGR5 antibody

PRODUCT SPECIFICATIONS

Host	Rat
Clonality	Monoclonal
Isotype	IgG2a/kappa
Clone Number	BEE-6F7
Specificity	anti-human LGR5 (GPR49)
Purity/Purification	Protein G
Sequence Length	835
Applicable Applications for anti-LGR5 antibody	ELISA (Competitive ELISA), FCM/FACS (Flow Cytometry)
Buffer	Phosphate buffered saline, pH 7.2
Immunogen	Genetic immunisation with cDNA encoding human LGR5
Selection	Based on recognition of the complete native protein expressed on transfected mammalian cells
Preparation and Storage	Short term: 2 degree C - 8 degree C Long term: -20 degree C (avoid repeated freezing and thawing)

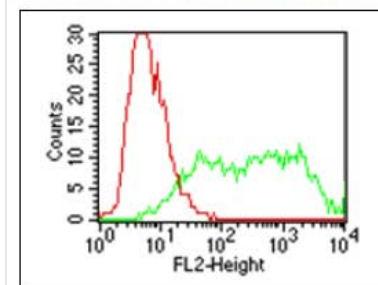
IMAGES



Application Data

Fig.2: CGE analysis of purified GM-0607 monoclonal antibody. Lane 1: molecular weight marker, Lane 2: 2 mug of purified GM-0607 antibody. Proteins were separated by CGE (capillary gel electrophoresis, Agilent 2100 Bioanalyzer). Internal control bands (240 kDa / 7 kDa / 4,5 kDa).

Specificity testing by flow cytometry



FCM/FACS (Flow Cytometry)

Fig.1: FACS analysis of BOSC23 cells using BEE-6F7. BOSC23 cells were transiently transfected with an expression vector encoding either LGR5-hum (green curve), or an irrelevant protein (control transfectant (red curve). Binding of BEE-6F7 was detected with a PE-conjugated secondary antibody. A positive signal was obtained only with LGR5-hum transfected cells.

ADDITIONAL INFORMATION

Related Product Information for anti-LGR5 antibody	LGR5 (Leucine-rich repeat-containing G protein-coupled receptor 5), also known as GPR49, belongs to the superfamily of G protein-coupled receptors (GPCRs) (1). It is a 907 amino acid multi-pass membrane protein and has multiple N-terminal leucine-rich repeats, which are important for interaction with the glycoprotein ligands, and 7 transmembrane domains. LGR5 is expressed across a diverse range of tissue such as in the muscle, placenta, spinal cord and brain and particularly as a biomarker of adult stem cells in certain tissues (2). LGR5 is a member of the Wnt signaling pathway. Although its ligand remains elusive, it has been shown that costimulation with R-spondin 1 and Wnt-3a induce increased internalization of LGR5 (3). LGR5 is overexpressed in certain cancer types, e.g. gastrointestinal tumours and is thought to represent a tumour suppressor, although its role there is still unclear.
References	1. McDonald T, Wang R, Bailey W, Xie G, Chen F, Caskey CT, Liu Q (1998). Identification and cloning of an orphan G protein-coupled receptor of the glycoprotein hormone receptor subfamily". Biochem Biophys Res Commun 247 (2): 266-70 2. Hsu SY, Liang SG, Hsueh AJ (1998). Characterization of two LGR genes homologous to gonadotropin and thyrotropin receptors with extracellular leucine-rich repeats and a G protein-coupled, seven-transmembrane region. Mol. Endocrinol. 12: 1830-45 3. de Lau W1, Barker N, Low TY, Koo BK, Li VS, Teunissen H, Kujala P, Haegebarth A, Peters PJ, van de Wetering M, Stange DE, van Es JE, Guardavaccaro D, Schasfoort RB, Mohri Y, Nishimori K, Mohammed S, Heck AJ, Clevers H.(2011) Lgr5 homologues associate with Wnt receptors and mediate R-spondin signalling. Nature 476: 293-7

NCBI AND UNIPROT INFORMATION

NCBI GI #	469608416
NCBI GeneID	8549
NCBI Accession #	NP_001264156.1
NCBI GenBank Nucleotide #	NM_001277227.1
Molecular Weight	92,006 Da
NCBI Official Full Name	leucine-rich repeat-containing G-protein coupled receptor 5 isoform 3
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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/monoclonal/lgr5-gpr49-antibody-clone-bee-6f7-competitive-elisa-flow-cytometry-elisa/71492>