
Alternate Names	BNMD17, GPR48, DPSL
Isotype	IgG2a
Conjugate	Unconjugated
Background	Human Leucine-rich repeat-containing G-protein coupled receptor 4 (LGR4), also called BNMD17, GPR48, and DPSL, is a 7-transmembrane G protein-coupled receptor (GPCR). It is a Class B GPCR. Upon binding R-spondins, LGR4 triggers the canonical Wnt signaling pathway to increase expression of target genes. Unlike most classical G-protein coupled receptors, LGR4 does not activate heterotrimeric G-proteins to transduce the signal. LGR4 is a potential diagnostic biomarker and therapeutic target due to its promotion of tumorigenesis in some cancers. Human LGR4 protein has ~97% and ~93% sequence homology with macaque and mouse LGR4, respectively.

Product Details

Specificity	Detects human and mouse Leucine-rich repeat-containing G-protein coupled receptor 4/LGR4 transfectants but not irrelevant transfectants in flow cytometry.
Antibody Type	Monoclonal antibody
Host Species	Mouse
Immunogen	LGR4 N-terminus, the exact sequence of the immunogen is proprietary.; UniProt # Q9BXB1
Formulation / Storage buffer	0.22µm filtered PBS, pH 7.4
Shipping	Frozen Dry Ice
Purification	Affinity Enrichment
Stability & Storage	On receipt, store at -70 C or lower for long term storage. This product is stable at: -70 C for 6 months from date of receipt. Avoid repeated freeze-thaw cycles

Anti-LGR4 Monoclonal Antibody

Product Code: CABh-25292

Clone: 10C10-C10

For Research Use Only (RUO)

Verified Application

ELISA, SPR, Flow cytometry

Recommended Usage

ELISA: starting concentration 1 µg/mL.

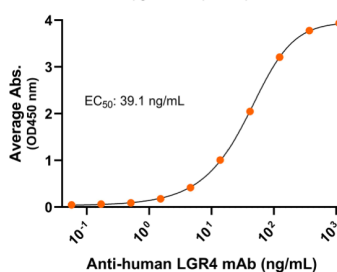
Flow cytometry: 0.8 µg/1E6 cells.

LSPR: Recommended maximum concentration, 100 nM.

Bioactive Data, Detection of Antigen by:

ELISA

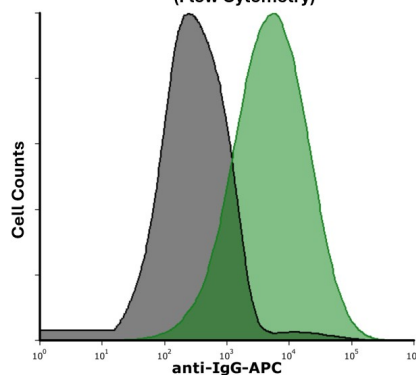
Anti-human LGR4 Monoclonal Antibody, ELISA
0.2µg of LGR4 protein per well



Immobilized human LGR4 at 2 µg/mL (100 µL/well) can bind mouse Anti-LGR4 Monoclonal Antibody (Cat. No. CABh-25292) with half maximal effective concentration (EC₅₀) range of 19.6-78.2 ng/mL (QC tested).

Flow Cytometry

mAb binding LGR4 expressing live cells
(Flow Cytometry)



Detection of human LGR4 in HEK293 human cell line transiently transfected with human LGR4 by Flow Cytometry. HEK293 cell line transfected with human LGR4 was stained with isotype control (black curve) or mouse Anti-LGR4 Monoclonal Antibody (Cat. No. CABh-25292) (green curve) by APC-conjugated Anti-Mouse IgG Secondary Antibody.

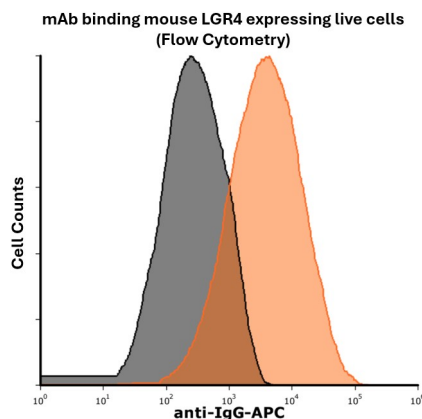
Anti-LGR4 Monoclonal Antibody

Product Code: CABh-25292

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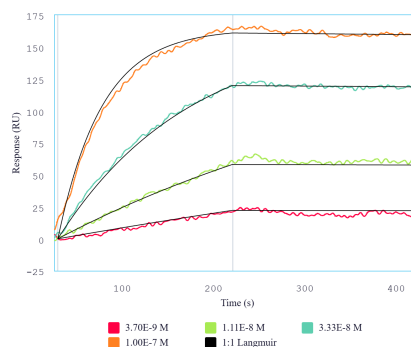
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Flow Cytometry



Detection of mouse LGR4 in HEK293 human cell line transiently transfected with mouse LGR4 by Flow Cytometry. HEK293 cell line transfected with mouse LGR4 was stained with isotype control (black curve) or mouse Anti-LGR4 Monoclonal Antibody (Cat. No. CABh-25292) (green curve) by APC-conjugated Anti-Mouse IgG Secondary Antibody.

SPR



Immobilized human LGR4 protein can bind Mouse Anti-Human LGR4 Monoclonal Antibody (Cat. No. CABh-25292) with a KD of 0.1-0.4 nM as determined by LSPR (Nicoya Alto).



Anti-LGR4 Monoclonal Antibody

Product Code: CABh-25292

Clone: 10C10-C10

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Antigen Details

Structure	7-transmembrane protein, G protein-coupled receptor (GPCR)
Function	Activator of the Wnt signaling pathway required for the development of various organs
Ligand / Receptor	R-spondins
Cell Type	Variable expression in most tissues; over-expressed on cancer cells, for example, lung cancer adenocarcinomas
Molecular Family	G protein-coupled receptor
Gene ID	Q9BXB1