



## Anti-Human LGR4 Monoclonal Antibody

Product Code: CABh-25292

Clone: 10C10-C10

For Research Use Only (RUO)

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<b>Alternate Names</b>	BNMD17, GPR48, DPSL
<b>Isotype</b>	IgG2a
<b>Conjugate</b>	Unconjugated
<b>Background</b>	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

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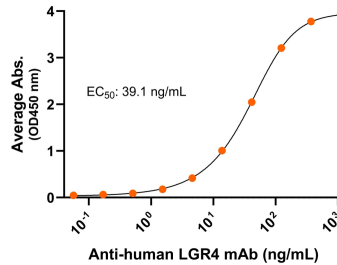
<b>Specificity</b>	Human Leucine-rich repeat-containing G-protein coupled receptor 4/LGR4 shows low affinity binding to LGR4 transfected cells by flow cytometry.
<b>Antibody Type</b>	Monoclonal antibody
<b>Host Species</b>	Mouse
<b>Immunogen</b>	LGR4 N-terminus, the exact sequence of the immunogen is proprietary.; UniProt # Q9BXB1
<b>Formulation / Storage buffer</b>	0.22µm filtered PBS, pH 7.4
<b>Shipping</b>	Frozen Dry Ice
<b>Purification</b>	Affinity Enrichment
<b>Stability &amp; Storage</b>	-80°C
<b>Verified Application</b>	ELISA, SPR, Flow cytometry
<b>Recommended Usage</b>	ELISA: starting concentration 1 µg/mL. LSPR: Recommended maximum concentration, 100 nM.

**Bioactive Data, Detection of Antigen by:**

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**ELISA**

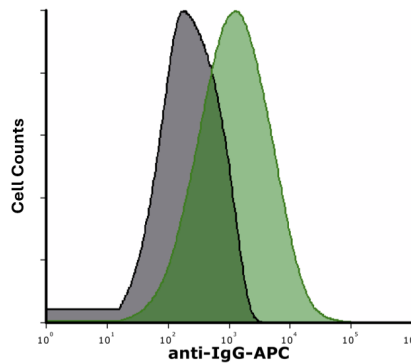
**Anti-human LGR4 Monoclonal Antibody, ELISA**  
 0.2µg of LGR4 protein per well



Immobilized human LGR4 at 2 µg/mL (100 µL/well) can bind Mouse Anti-Human 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**

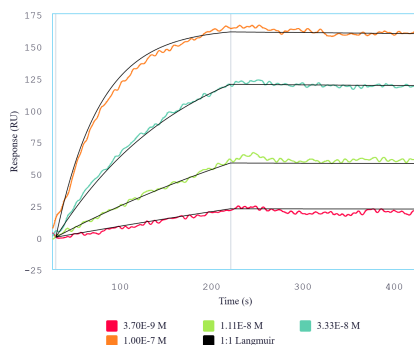
**mAb binding LGR4 expressing live cells**  
 (Flow Cytometry)



Detection of 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-Human LGR4 Monoclonal Antibody (Cat. No. CABh-25292) (green curve) by APC-conjugated Anti-Mouse IgG Secondary Antibody.

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**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).

## Antigen Details

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