

Anti-GPR56 Monoclonal Antibody**Product Code: CABh-24116****Clone: 2G6-F10****For Research Use Only (RUO)**

Alternate Names	ADGRG1, BFPP, BPPR, TM7LN4, TM7XN1, adhesion G protein-coupled receptor G1
Isotype	IgG2a
Conjugate	Unconjugated
Background	Human G protein-coupled receptor 56 (GPR56) is a 7-transmembrane G protein-coupled receptor (GPCR), also known as TM7XN1, encoded by the ADGRG1 gene. GPR56 is an orphan GPCR. GPR56 is required for hematopoietic cluster formation during endothelial to hematopoietic stem cell transition. Down-regulation of GPR56 has been linked to severe depression and overexpression of GPR56 has been detected in many cancers such as breast, colon, lung, and ovarian making GPR56 a possible therapeutic target. Human GPR56 protein has >75% sequence homology with mouse GPR56.

Product Details

Specificity	Detects human G protein-coupled receptor 56/GPR56 transfectants but not irrelevant transfectants in flow cytometry. Does not detect mouse GPR56 transfectants in flow cytometry.
Antibody Type	Monoclonal antibody
Host Species	Mouse
Immunogen	GPR56 N-terminus, the exact sequence of the immunogen is proprietary.; UniProt # Q9Y653
Formulation / Storage buffer	Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4 with 10% trehalose as a protectant



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Reconstitution

For best performance, we strongly recommend you reconstitute the lyophilized product with deionized water to a stock solution of 500 µg/mL.

Solubilize for 20 minutes at room temperature with occasional gentle mixing. Avoid shaking or vortexing.

For 25µg product size:
Reconstitute with 50 µL sterile deionized water.

For 100µg product size:
Reconstitute with 200 µL sterile deionized water.

Shipping

Product is shipped at ambient temperature.

Purification

Affinity Enrichment

Stability & Storage

On receipt, store at -20 C or lower for long term storage.

This product is stable at:

-20 to -70 C for 12 months from date of receipt in lyophilized state.

-70 C for 3 months after reconstitution under sterile conditions.

Avoid repeated freeze-thaw cycles

Verified Application

ELISA, Flow cytometry

Recommended Usage

ELISA: starting concentration 1 µg/mL

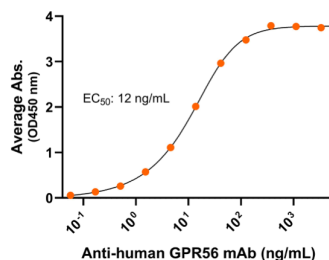
Flow cytometry: 0.8 µg/1E6 cells

Bioactive Data, Detection of Antigen by:

ELISA

Anti-human GPR56 Monoclonal Antibody, ELISA

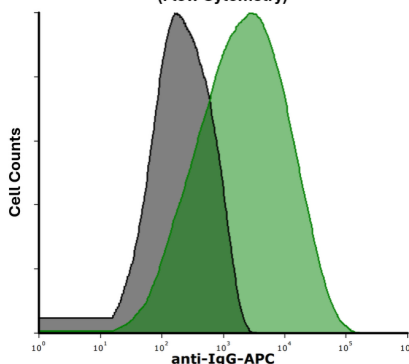
0.2 µg of GPR56 protein per well



Immobilized human GPR56 fragment at 2 µg/mL (100 µL/well) can bind mouse Anti-GPR56 Monoclonal Antibody (Cat. No. CABh-24116) with half maximal effective concentration (EC₅₀) range of 6-24 ng/mL (QC tested).

Flow Cytometry

mAb binding GPR56 expressing live cells (Flow Cytometry)



Detection of GPR56 expressed on HEK293 cell surface transiently transfected with full-length human GPR56 by Flow Cytometry. HEK293 cell line transfected with human GPR56 was stained with isotype control (black curve) or mouse Anti-GPR56 Monoclonal Antibody (Cat. No. CABh-24116) (green curve) by APC-conjugated Anti-Mouse IgG Secondary Antibody.



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Antigen Details

Structure	7-transmembrane protein, G protein-coupled receptor (GPCR)
Function	hematopoietic cluster formation
Ligand / Receptor	transglutaminase 2 and collagen III
Cell Type	neural progenitor cells, melanoma cells, and lymphocytes, such as effector memory T cells, $\gamma\delta$ T cells, and NK cells
Molecular Family	G protein-coupled receptor
Gene ID	Q9Y653