Anti-Human NPY2R Monoclonal Antibody
Product Code: CABh-25309
Clone: 2H3-G1
For Research Use Only (RUO)

Alternate Names	NPY2-R, Neuropeptide Y receptor Y2
Isotype	IgG1
Conjugate	Unconjugated
Background	Human Neuropeptide Y receptor type 2 (NPY2R) is a 7-transmembrane G protein-coupled receptor (GPCR). NPY2R is a Class A GPCR. NPY2R is highly expressed in the central nervous system, specifically the amygdala, corpus callosum and hippocampus, and also subsets of enteric neurons. NPY2R is associated with neuroprotection and anti-epileptic mechanisms as well as obesity and diabetes through signaling with its endogenous peptide ligands neuropeptide Y (NPY) and peptide YY (PYY). Human NPY2R protein has ~99% and ~94% sequence homology with macaque and mouse NPY2R, respectively.

Product Details

Specificity	Detects human Neuropeptide Y receptor type 2/NPY2R transfectants but not irrelevant transfectants in flow cytometry.
Antibody Type	Monoclonal antibody
Host Species	Mouse
Immunogen	NPY2R N-terminus, the exact sequence of the immunogen is proprietary.; UniProt # P49146
Formulation / Storage buffer	Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4 with 10% trehalose as a protectant
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.

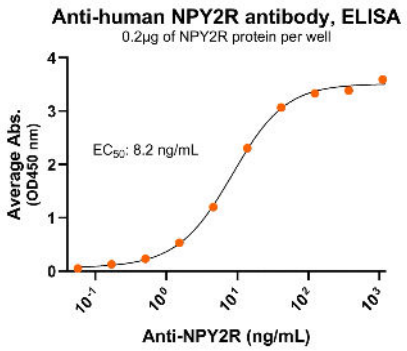
Anti-Human NPY2R Monoclonal Antibody
Product Code: CABh-25309
Clone: 2H3-G1
For Research Use Only (RUO)

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

Anti-Human NPY2R Monoclonal Antibody
Product Code: CABh-25309
Clone: 2H3-G1
For Research Use Only (RUO)

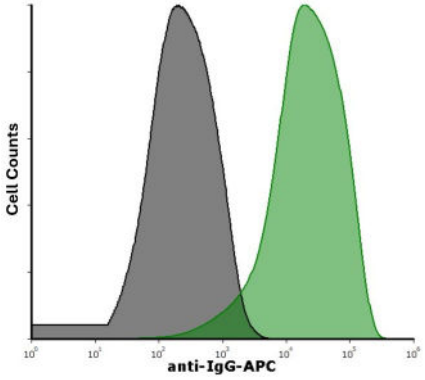
Bioactive Data, Detection of Antigen by:

ELISA



Immobilized human NPY2R fragment at 2 μg/mL (100 μL/well) can bind mouse Anti-NPY2R Monoclonal Antibody (Cat. No. CABh-25309) with half maximal effective concentration (EC50) range of 4.1-16.4 ng/mL (QC tested).

Flow Cytometery



Detection of human NPY2R expressed on HEK293 cell surface transiently transfected with full-length human NPY2R by Flow Cytometry. HEK293 cell line transfected with human NPY2R was stained with isotype control (black curve) or mouse Anti-NPY2R Monoclonal Antibody (Cat. No. CABh-25309) (green curve) by APC-conjugated Anti-Mouse IgG Secondary Antibody.

Anti-Human NPY2R Monoclonal Antibody
Product Code: CABh-25309
Clone: 2H3-G1
For Research Use Only (RUO)

Antigen Details

Structure	7-transmembrane protein, G protein-coupled receptor (GPCR)
Function	NPY or PYY binding induces adenylate cyclase-inhibiting G protein-coupled receptor signaling and results in the inhibition of cAMP production
Ligand / Receptor	neuropeptide Y (NPY) and peptide YY (PYY)
Cell Type	Neurons and other central nervous system cells
Molecular Family	G protein-coupled receptor
Gene ID	P49146