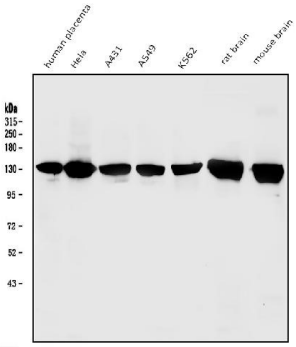
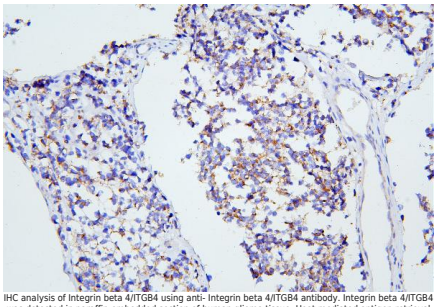
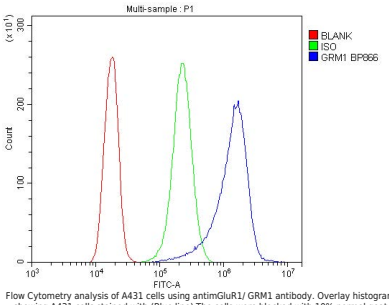
Product name:	mGLUR1/GRM1 Rabbit Polyclonal Antibody
Cat number:	AB-84770
Conjugate:	Unconjugated
Size:	200 ug
Clone:	POLY
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	E.coli-derived human mGluR1/GRM1 recombinant protein (Position: R25-E466).
Reactivity:	Human, Mouse, Rat
Applications:	Western blot: 1:1000-1:5000 Immunohistochemistry (Paraffin-embedded Section): 1:500-1:1000 Immunofluorescence: 1:50-1:200 Flow Cytometry: 1-3ug/1x106 cells, ELISA: 0.1-0.5ug/ml
Molecular Weight:	132 kDa
Purification:	Immunogen affinity purified.
Form:	Lyophilized, Add 200ul of water to obtain the final concentration of 1mg/ml.
Buffer:	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Storage:	Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.
Background:	This gene encodes a metabotropic glutamate receptor that functions by activating phospholipase C. L-glutamate is the major excitatory neurotransmitter in the central nervous system and activates both ionotropic and metabotropic glutamate receptors. Glutamatergic neurotransmission is involved in most aspects of normal brain function and can be perturbed in many neuropathologic conditions. The canonical alpha isoform of the encoded protein is a disulfide-linked homodimer whose activity is mediated by a G-protein-coupled phosphatidylinositolcalcium second messenger system. This gene may be associated with many disease states, including schizophrenia, bipolar disorder, depression, and breast cancer. Alternative splicing results in multiple transcript variants encoding different isoforms.



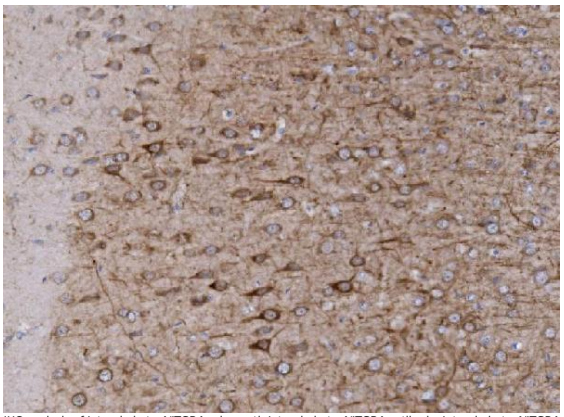
Western blot analysis of mGluR1/GRM1 using antimGluR1/ GRM1 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human placenta tissue lysates, Lane 2: human Hela whole cell lysates, Lane 3: human A431 whole cell lysates, Lane 4: human A549 whole cell lysates, Lane 5: human K562 whole cell lysates, Lane 6: rat brain tissue lysates, Lane 7: mouse brain tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit antimGluR1/ GRM1 antigen affinity purified polyclonal antibody at 0.25 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for mGluR1/GRM1 at approximately 132KD. The expected band size for mGluR1/GRM1 is at 132KD.



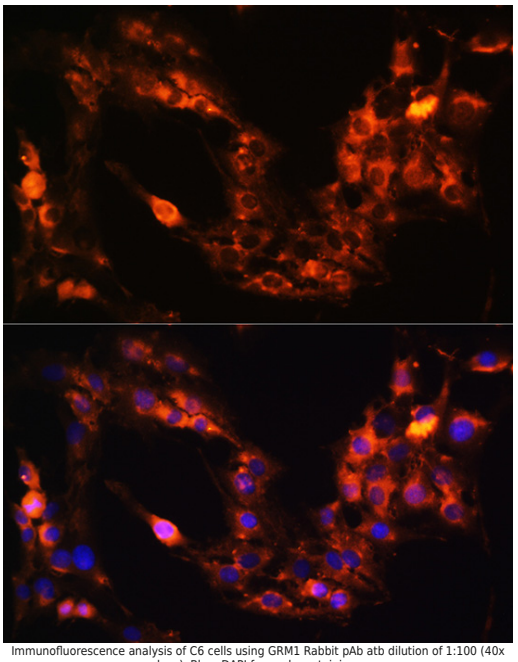
IHC analysis of Integrin beta 4/ITGB4 using anti- Integrin beta 4/ITGB4 antibody. Integrin beta 4/ITGB4 was detected in paraffin-embedded section of human glioma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Integrin beta 4/ITGB4 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



Flow Cytometry analysis of A431 cells using antimGluR1/ GRM1 antibody. Overlay histogram showing A431 cells stained with (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit antimGluR1/ GRM1 Antibody for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC analysis of Integrin beta 4/ITGB4 using anti- Integrin beta 4/ITGB4 antibody. Integrin beta 4/ITGB4 was detected in paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Integrin beta 4/ITGB4 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin- Biotin-Complex (SABC) with DAB as the chromogen.



Immunofluorescence analysis of C6 cells using GRM1 Rabbit pAb atb dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.