

DATASHEET

Version: 2016-08-17

mGluR5 Antibody, pAb, Rabbit**Cat. No.:** A01493-40**Size:** 40 µg**Synonyms:** Rabbit Anti-mGluR5 Polyclonal Antibody;**Description:**

Metabotropic glutamate receptor 5 (mGluR5) is one member of G-protein coupled receptor 3 family. The activity of mGluR5 receptor is mediated by a G-protein that activates phosphatidylinositol-calcium second messenger system and generates calcium-activated chloride current. mGluR5 plays a critical role in the modulation of synaptic plasticity and behavioral responses to multiple substances of abuse. The expression of mGluR5 is widely distributed in brain regions relating to memory, such as the hippocampus. mGluR5 regulates phospholipid hydrolysis in developing cortical neurons through the activation of PLC-β1. The receptor regulates glutamatergic transmission in a variety of brain regions, particularly those thought to participate in reward-related behaviors. Its activation by the group I mGluR agonist (RS)-3,5-dihydroxyphenylglycine (DHPG) can induce long term depression (DHPG-LTD) of glutamatergic synaptic transmission.

GenScript **Rabbit Anti-mGluR5 Polyclonal Antibody** is developed in rabbit using a KLH-coupled synthetic peptide from C-terminal of human mGluR5 (Swiss Prot: P41594).

Immunogen: KLH-coupled synthetic peptide from C-terminal of human mGluR5 (Swiss Prot: P41594)

Host: Rabbit**Conjugation:** Unconjugated**Formulation:**

0.5 mg/ml, lyophilized with PBS, pH 7.4, containing 0.02% sodium azide

Ig Subclass: Rabbit IgG

Specificity: GenScript Rabbit Anti-mGluR5 Polyclonal Antibody detects endogenous levels of human mGluR5. It is predicted to react with mouse and rat mGluR5 protein according to sequence homology.

Positive Control: Ramos**Purification:** Immunoaffinity chromatography**Applications:**

Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Western blot: 1-2 µg/ml**Flow cytometry:** 1-3 µg for 1 x 10⁶ cells

Immunohistochemistry: 5-10 µg/ml **Other applications:** user-optimized

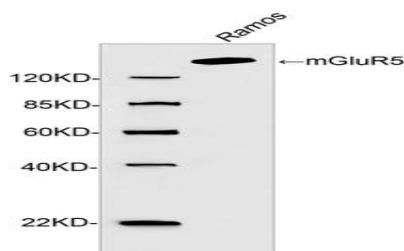
Species Reactivity: Human**Reconstitution:**

Reconstitute the lyophilized powder with deionized water (or equivalent) to an antibody concentration of 0.5 mg/ml.

Storage:

The antibody is stable in lyophilized form if stored at -20°C or below. The reconstituted antibody can be stored for 2-3 weeks at 2-8°C. For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.

Example

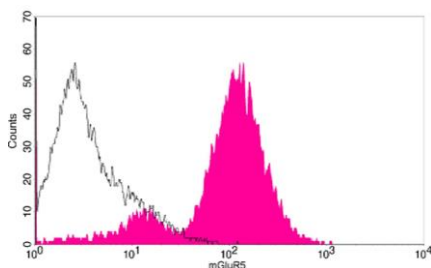


Western blot analysis of cell lysate using 2 µg/ml Rabbit Anti-mGluR5 Polyclonal Antibody (GenScript, A01493)

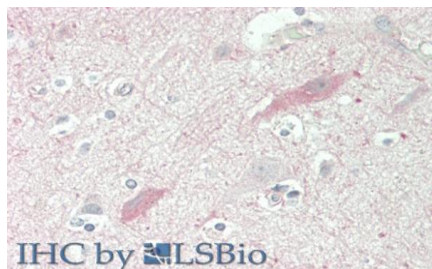
The signal was developed with IRDye™ 800 Conjugated Goat Anti-Rabbit IgG.

Predicted Size: 132 KD

Observed Size: 132 KD



Flow cytometric analysis of Ramos cells using mGluR5 Antibody, pAb, Rabbit (GenScript, A01493; shaded histogram) or with an isotype control antibody (GenScript, A01008; open histogram), followed by R-PE conjugated anti-rabbit IgG.



Immunohistochemistry analysis of human brain, cortex tissue slide (Paraffin embedded) using mGluR5 Antibody, pAb, Rabbit (GenScript, Cat.No. A01493, 10 µg/ml)