Anti-GluA4C (GluR4C)

(AMPA-type glutamate receptor subunit-4)

Code Number : GluR4C-Rb-Af160 (rabbit, RRID : AB_2571755)

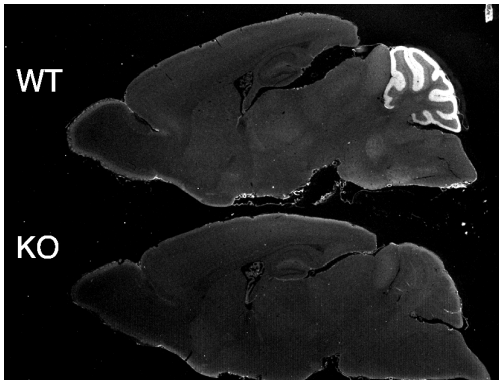
Size : 20 μg and 50 μg / See label on vial
(affinity-purified with antigen polypeptide)

Formulation : Liquid ; 200 μg/ml in PBS with 0.05% NaN_3.

Storage : Store at 4˚C. The antibody can be stored at 4˚C. The antibody can be also aliquotted and stored at -80˚C for long-term storage. Avoid repeated freeze-thawing. Non-hazardrous. No MSDS required.

Species : rabbit, polyclonal

Antigen : mouse GluA4, 849-902 aa
(AB022913, LTFSEAIRNKARLSITGS VGENGRVLTPDCPKAVHTGTAIRQSS GLAVIASDLP)



Specificity : mouse (others not tested)
Immunoblot detects a single protein band at 100kDa. No cross reactivity to other GluRs. Lack of signal in GluA4-KO brain.

Applications : In general, affinity-purified antibody is used at around 1 microgram/ml for immunoblot and immunohistochemistry. The most appropriate concentration should be determined by users, because it depends on contents in given cells, tissues and organs.

Remarks : For immunohistochemistry for neuronal iGluRs, users should adopt postembedding immunogold for electron microscopic detection and protease predigestion for light microscopic detection (see the below reference). For glial GluR, these antigen-exposing methods are not necessary (unpublished information).

Research Use : For research use only, not for use in diagnostic procedures.

Reference : 1) Nagy, G.G., Al-Ayyan, M., Andrew, D., Fukaya, M., Watanabe, M., Todd, A.J.

FRONTIER INSTITUTE Co.Ltd
1-777-12,Shinko-nishi,Ishikari,Hokkaido 061-3241 Japan
TEL (0)133-73-9194 FAX (0)133-73-4567
e-mail : info@frontier-institute.com
URL : http://www.frontier-institute.com/

(2004) Widespread expression of the AMPA receptor GluR2 subunit at glutamatergic synapses in the rat spinal cord and phosphorylation of GluR1 in response to noxious stimulation revealed with an antigen unmasking method. J. Neurosci. 24:5766-5777.

2) Hashimoto, K., Fukaya, M., Qiao, X., Sakimura, K., Watanabe, M., and Kano, M. (1999) Impairment of AMPA receptor function in cerebellar granule cells of ataxic mutant mouse Stargazer. J. Neurosci. 19:6027-6036.

3) Yamazaki M, Fukaya M, Hashimoto K, Yamasaki M, Tsujita M, Itakura M, Abe M, Natsume R, Takahashi M, Kano M, Sakimura K, Watanabe M: TARPs gamma-2 and gamma-7 are essential for AMPA receptor expression in the cerebellum. **Eur J. Neurosci.**.31:2204-222, 2010.

4) Yamasaki M, Miyazaki T, Azechi H, Abe M, Natsume R, Hagiwara T, Aiba A, Mishina M, Sakimura K, Watanabe M: Glutamate receptor GluRd2 is essential for input pathway-dependent regulation of synaptic AMPAR contents in cerebellar Purkinje cells. **J. Neurosci**. 31:3362-3374, 2011.

FRONTIER INSTITUTE Co.Ltd
1-777-12,Shinko-nishi,Ishikari,Hokkaido 061-3241 Japan
TEL (0)133-73-9194 FAX (0)133-73-4567
e-mail : info@frontier-institute.com
URL : http://www.frontier-institute.com/