

***Anti-3PGDH****(Phgdh, 3-phosphoglycerate dehydrogenase)***Code Number** : 3PGDH-Rb-Af303 (rabbit, RRID : AB\_2571653)

: 3PGDH-GP-Af198 (guinea pig, RRID : AB\_2571654)

**Size** : 20 µg and 50 µg / See label on vial

(affinity-purified with antigen polypeptide)

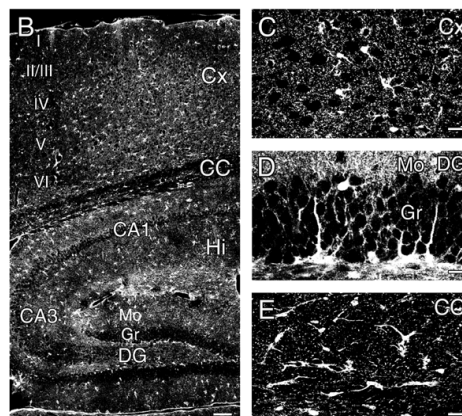
**Formulation** : Liquid ; 200 µg/ml in PBS with 0.05% NaN<sub>3</sub>.

(affinity-purified with antigen polypeptide)

**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-hazardous. No MSDS required.**Species** : rabbit / guinea pig, polyclonal**Antigen** : rat, full sequence (NM031620)**Specificity** : Mouse (others not tested)

Immunoblot detects a single band at 57 kDa.

This selectively stains astroglia in the central nervous system, Schwann cells in the peripheral nervous system, and distinct tubular segments in the kidney.

**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.**Research Use** : For research use only, not for use in diagnostic procedures.**Remarks** : Rabbit and guinea pig antibodies are similar in the titer and specificity.**Reference** : 1) Yamasaki, M., Yamada, K., Furuya, S., Mitoma, J., Hirabayashi, Y., Watanabe, M. (2001) 3-phosphoglycerate dehydrogenase (3PGDH), a key enzyme of L-serine biosynthesis, is preferentially

expressed in the radial glia/astrocyte lineage and olfactory ensheathing glia in the mouse brain. **J. Neurosci.** 21:7691-7704.

2) Sakai, K., Shimizu, H., Koike, T., Furuya S., Watanabe, M. (2003) Neutral amino acid transporter ASCT1 is preferentially expressed in L-Ser-synthetic/storing glial cells in the mouse with transient expression in developing capillaries. **J. Neurosci.** 23:550-560.

3) Yamashita, N., Sakai, K., Furuya, S., Watanabe, M. (2003) Selective expression of L-serine synthetic enzyme 3PGDH in Schwann cells, perineuronal glia, and endoneurial fibroblasts along sciatic nerves and its upregulation after crush injury. **Arch. Histol. Cytol.** 66:429-436.

4) Takasaki C, Miura E, Watanabe M: Segmental and complementary expression of L-serine biosynthetic enzyme 3-phosphoglycerate dehydrogenase and neutral amino acid transporter ASCT1 in the mouse kidney. **Biomed Res**, in press