

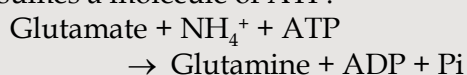
Catalog No. LF-MA0095

MONOCLONAL ANTIBODY



Anti-Glutamine Synthetase (8G9)

Background : Glutamine Synthetase(GS) catalyzes the conversion of ammonia and glutamate to glutamine. This reaction consumes a molecule of ATP:



GS is found in astrocytes as an octamer of identical 45kDa subunits. Most well known function of GS is the detoxification of brain ammonia. It also has an important role in controlling metabolic regulations of neurotransmitter glutamate. Because of the multiple functions and importance of GS in cellular metabolism, both catalytic activities and synthesis are highly regulated. The activity of GS is controlled by adenylation. Its activity is decreased in the cerebral cortex of brains affected by Alzheimer's disease, particularly in the vicinity of senile plaques. It is also decreased under conditions of glucose deprivation. On the other hands, the level of expression of GS is increased during ischemia in vivo or hypoxia in culture.

Immunogen : Recombinant human protein purified from *E.coli*

Host : Mouse

Clone number : 8G9

Isotype : IgG2a, k

Size : 100ul

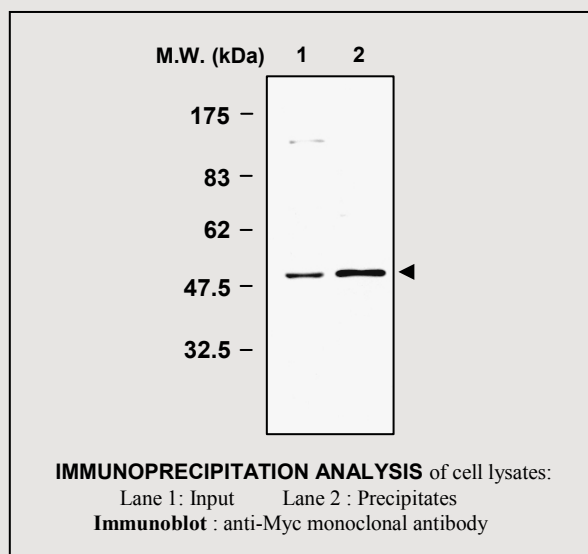
Composition : PBS containing 50% glycerol

Positive control : Bosc23 cell transfected with myc-GS

Storage : Store for 1 year at -20°C from date of shipment

Species cross reactivity

Human	Mouse	Rat
+	NT	NT



Applications :

Immunoprecipitation (1-2ul/400ul lysates)

Background Reference :

- 1) Suárez, I. et al. (2002) *Neurochemistry International*, 41: 123-142
- 2) Kosenko, E. et al (2003) *Neurochemistry International*, 43: 493-499

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