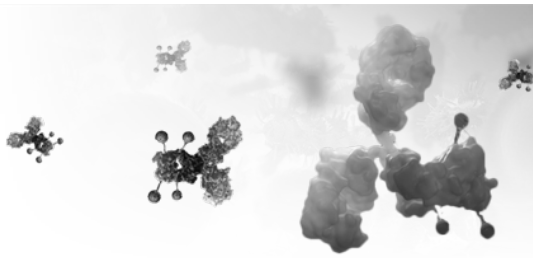

Rabbit Anti-Human Glutamine Synthetase monoclonal antibody, clone 8I0M27 (CABT-L1329)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	This antibody is predicted to react with Monkey, Cat and Pig.
Target	GS
Immunogen	Protein corresponding to Human GLUL (aa 2-373)
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Clone	8I0M27
Purification	Protein A Purified
Conjugate	Unconjugated
Applications	FC, ICC, IF, WB
Format	Liquid
Concentration	0.5 mg/ml
Buffer	PBS, pH 7.2
Preservative	0.09% Sodium Azide
Storage	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221

BACKGROUND

Introduction	Glutamine Synthetase (GS) catalyzes the conversion of ammonia and glutamate to glutamine. This reaction consumes a molecule of ATP: Glutamate + NH4+ + ATP = Glutamine + ADP + Pi. 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 adenylylation. 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.
Keywords	GLNA;GLNS;GLUL;Glutamate ammonia ligase;Glutamate decarboxylase;Glutamate--ammonia ligase;Glutamine synthetase;GS;PIG 43;PIG 59;PIG43;PIG59;Proliferation inducing protein 43;GS

GENE INFORMATION

Entrez Gene ID	324

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221