

**Rabbit Anti-Glutamine Synthetase [MD284R]: RM0224, RM0224RTU7**

**Intended Use:** For Research Use Only

**Description:** Glutamine synthetase, an enzyme that catalyzes the amination of glutamic acid to form glutamine, is found in mammals as an octamer of eight identical 45 kDa subunits. Glutamine synthetase activity has been shown to be a useful marker of astrocytes and an important differentiation feature in retina. Glutamine synthetase is also present in hepatocytes near the hepatic central veins. In liver focal nodular hyperplasia (FNH), the glutamine synthetase immunohistochemical staining pattern appears map-like, which is useful in differentiating FNH from normal liver tissue or other hepatic mass lesions.

**Specifications:**

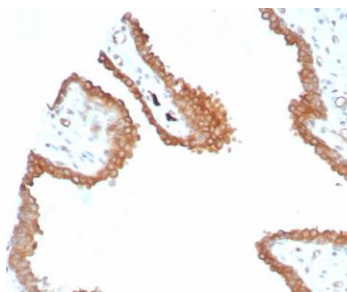
Clone: MD284R  
Source: Rabbit  
Isotype: IgG  
Reactivity: Human  
Immunogen: Recombinant fragment aa 50-250 of human Glutamine Synthetase protein  
Localization: Cytoplasm  
Formulation: Purified antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
Storage: Store at 2°- 8°C  
Applications: IHC  
Package:

Description	Catalog No.	Size
Glutamine Synthetase Concentrated	RM0224	1 ml
Glutamine Synthetase Prediluted	RM0224RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Normal liver, brain, stomach or thyroid  
Concentrated Dilution: 25-200  
Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C  
Incubation Time and Temp: 30-60 minutes @ RT  
Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human prostate stained with anti-glutamine synthetase using DAB

**References:**

1. Disrupted Neuroglial Metabolic Coupling after Peripheral Surgery. Femenía T, et al. J Neurosci 38:452-464, 2018.
2. Wang L, et al. Increased glutamine anabolism sensitizes non-small cell lung cancer to gefitinib treatment. Cell Death Discov 5:24, 2018.
3. Mesenchymal marker expression is elevated in Müller cells exposed to high glucose and in animal models of diabetic retinopathy. Zhou T, et al. Oncotarget 8:4582-4594, 2017.