

## **Glutamine Synthetase (ZR431)**

## Rabbit Monoclonal Antibody

Host: Rabbit Specificity: Human

Immunogen: Recombinant fragment (around aa 50-250) of human GLUL protein

**Ig Class**: IgG

Storage: Store at 2-8°C for up to 2 years for concentrate form and 18 months for predilute form.

**Specifications:** Glutamine Synthetase (ZR431) Rabbit Monoclonal primary antibody detects Glutamine Synthetase protein in formalin-fixed, paraffin-embedded samples by immunohistochemical (IHC) staining.

**Staining procedures:** Use formalin-fixed and paraffin-embedded sections. Retrieval conditions: Pretreatment of deparaffinized samples via heat-induced epitope retrieval is recommended. Detection method: Polymer antimouse/rabbit Ig detection system. Working dilution: 1:100-200. Positive Control: sample known to contain Glutamine Synthetase protein.

Localization: Cytoplasmic.

Intended Use: Research Use Only (RUO). This antibody is not for diagnostic use.

**Description:** Glutamine synthetase (Gl Syn) forms a homo-octamer that serves as a catalyst for the amination of glutamic acid to form glutamine. This enzyme is a marker for astrocytes, which serve as the primary site of conversion of glutamic acid to glutamine in the brain. Induction of glutamine synthetase is seen upon astrocyte cell contact with neurons. Elevated expression of glutamine synthetase in glial cells has been shown to protect neurons from degeneration due to excess glutamate. Glutamine synthetase is also present in the liver and is involved in nitrogen homeostasis. Overexpression of glutamine synthetase has been shown in primary liver cancers, indicating a potential role for glutamine synthetase in hepatocyte transformation.

**Supplied As:** Purified antibody in Tris-HCl pH 7.4 buffer containing stabilizing proteins (including < 1% Bovine Serum Albumin) and < 0.1% ProClin by volume.

## References:

- 1. Di Tommaso L, et al. Hepatology. 2007; 45:725-34.
- 2. Nakamoto Y. Hepatol Res. 2016; 47:251-65.

REF

Z2787RL/ Z2787RS/ Z2787RT/ Z2787RP (1.0ml Concentrate/ 0.5ml Con./ 0.1ml Con./ 7ml Pre-dil)



605 E. Huntington Dr., Suite 204 Monrovia, CA 91016 Tel: (626) 355-2053 http://www.zeta-corp.com

RUO (research use only)

**LOT** (lot number)

(catalogue number)

(expiry date)

(temperature

(consult Instructions for Use)