# Gl Syn (h4): 293 Lysate: sc-177288



The Power to Question

# **BACKGROUND**

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.

# **REFERENCES**

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# **CHROMOSOMAL LOCATION**

Genetic locus: GLUL (human) mapping to 1q25.3.

#### **PRODUCT**

GI Syn (h4): 293 Lysate represents a lysate of human GI Syn transfected 293 cells and is provided as 100  $\mu$ g protein in 200  $\mu$ I SDS-PAGE buffer.

# **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

# **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

#### **APPLICATIONS**

GI Syn (h4): 293 Lysate is suitable as a Western Blotting positive control for human reactive GI Syn antibodies. Recommended use:  $10-20~\mu$ l per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

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