

Catalog #: 63474

Aliases

Glutamate-Ammonia Ligase; Glutamine Synthetase; GLNS; Palmitoyltransferase GLUL; EC 6.3.1.2; GS; Glutamate-Ammonia Ligase (Glutamine Synthase); Cell Proliferation-Inducing Protein; Proliferation-Inducing Protein; Glutamate--Ammonia Ligase; Glutamate Decarboxylase; Glutamine Synthase; EC 2.3.1.225; PIG43; PIG59

Background

Gene Name: GLUL NCBI Gene Entry: 2752 UniProt Entry: P15104

Application Information

Molecular Weight: Predicted, 42 kDa, observed, 42 kDa

Clonality: Rabbit monoclonal antibody

Clone ID: 23GB1345

Species Reactivity: Human, mouse, rat

Applications Tested: Western blotting (WB), flow cytometry (FCM), immunocytochemistry (IC),

immunohistochemistry (IHC)

Immunogen

A synthesized peptide derived from human Glutamine Synthetase

Isotype

Rabbit IgG

Storage Buffer

Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.

Storage

Store at -20 °C for one year.

Recommended Dilutions

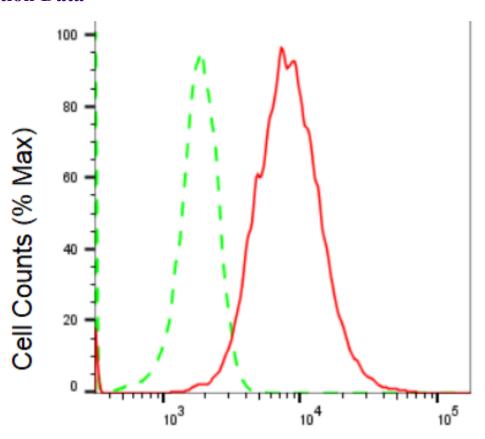
Western Blotting (WB): 1:1,000-1:5,000

Flow Cytometry (FCM): 1:2,000

Immunocytochemistry (IC): 1:100-1:1,000 Immunohistochemistry (IHC): 1:100-1:200

Note: This product is for research use only.

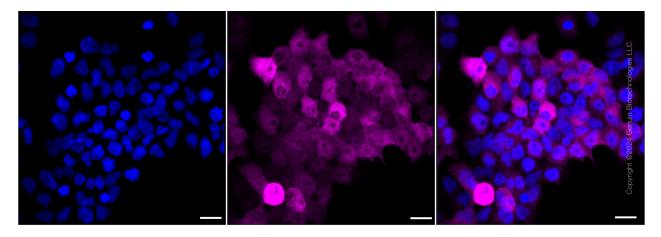
Validation Data



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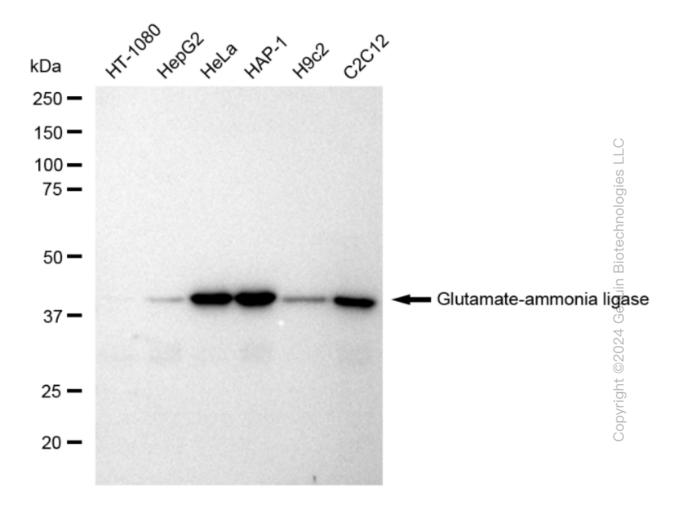
Glutamate-ammonia ligase-Alexa Fluor® 647

Flow cytometric analysis of Glutamate-ammonia ligase expression in HeLa cells using Glutamate-ammonia ligase antibody (Cat#63474, 1:2,000). Green, isotype control; red, Glutamate-ammonia ligase.

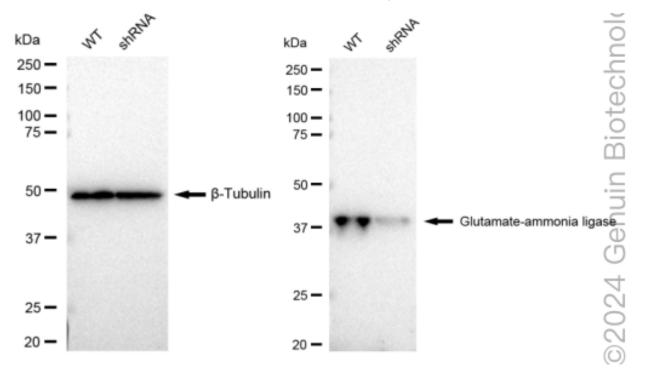


Immunocytochemical staining of HeLa cells with Glutamate-ammonia ligase antibody

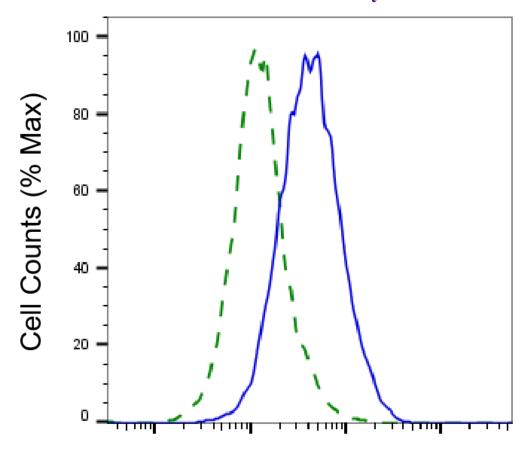
(Cat#63474, 1:1,000). Nuclei were stained blue with DAPI; Glutamate-ammonia ligase was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Western blotting analysis using anti-Glutamate-ammonia ligase antibody (Cat#63474). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Glutamate-ammonia ligase antibody (Cat#63474, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQTM ECL Substrate Kit (Cat#226).

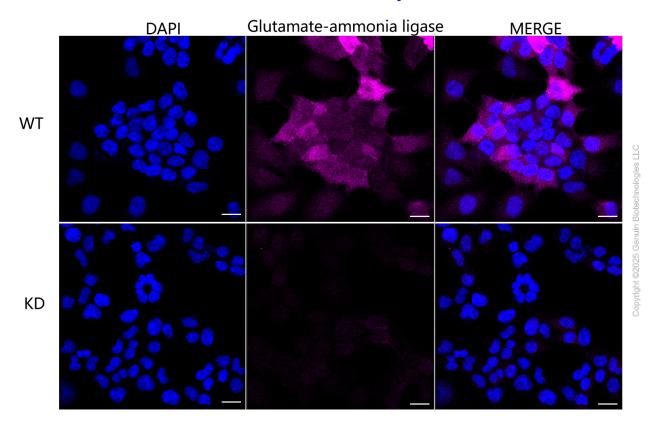


Western blotting analysis using anti-Glutamate-ammonia ligase antibody (Cat#63474). Glutamate-ammonia ligase expression in wild type (WT) and Glutamate-ammonia ligase shRNA knockdown (KD) HeLa cells with 30 μg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-Glutamate-ammonia ligase antibody (Cat#63474, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQTM ECL Substrate Kit (Cat#226).

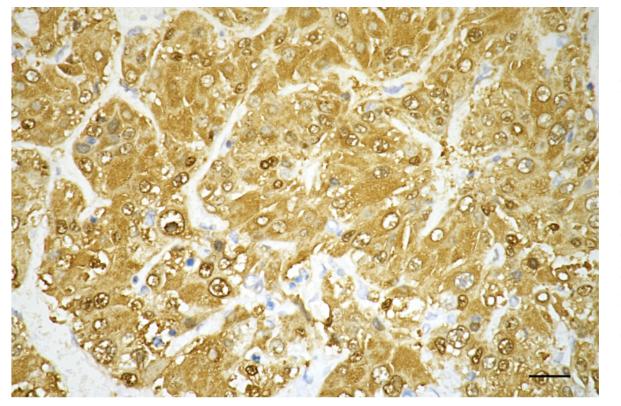


Glutamine Synthetase-Alexa Fluor® 647

Validation of Glutamine Synthetase knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with anti-Glutamine Synthetase antibody (Cat#63474, 1:2,000) and analyzed using CytoFLEX.



Immunocytochemical staining of HeLa cells using anti-Glutamate-ammonia ligase antibody (Cat#63474, 1:1,000), Top panel: wild-type (WT); Bottom panal: Glutamate-ammonia ligase shRNA knockdown (KD). Nuclei were stained blue with DAPI; Glutamate-ammonia ligase was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm. Permeabilization: Triton.



Immunohistochemistry was performed on paraffin-embedded human hepatocarcinoma using anti-Glutamate-ammonia ligase antibody (Cat#63474, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 μm.