

# **Product Datasheet**

# Glutaminase/GLS Antibody (monoclonal, 3G13) (orb865661)

Catalog Number orb865661

**Category** Antibodies

**Description** Anti-Glutaminase/GLS Antibody (monoclonal, 3G13). Tested in Flow Cytometry,

IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.

**Clonality** Monoclonal

**Species/Host** Mouse

**Isotype** Mouse IgG2a

**Conjugation** Unconjugated

**Reactivity** Human, Mouse, Rat

Form/Appearance Lyophilized

**Concentration** Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.

**Purification** Immunogen affinity purified.

**Immunogen** E.coli-derived human Glutaminase/GLS recombinant protein (Position: K396-

N654).

UniProt ID 094925

**MW** 56-73 kDa

**Tested applications** FC, ICC, IF, IHC, WB

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**Application notes** Western blot, 0.25-0.5 μg/ml, Human, Mouse, Rat

Immunohistochemistry(Paraffin-embedded Section), 2-5  $\mu$ g/ml, Human Immunocytochemistry/Immunofluorescence, 5  $\mu$ g/ml, Human Flow Cytometry (Fixed), 1-3  $\mu$ g/1x106 cells, Human. Adding 0.2 ml of distilled water will yield a

concentration of 500 µg/ml

**Cross Reactivity** No cross-reactivity with other proteins.

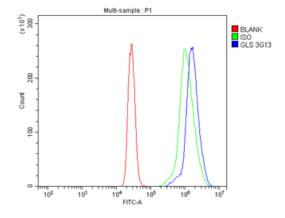
**Antibody Type** Primary Antibody

Clone Number 3G13

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -

20°C in small aliquots to prevent freeze-thaw cycles.

**Note** For research use only



Flow Cytometry analysis of U937 cells using anti-Glutaminase/GLS antibody. Overlay histogram showing U937 cells (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Glutaminase/GLS Antibody (1  $\mu$ g/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (5-10  $\mu$ g/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1  $\mu$ g/1x10^6) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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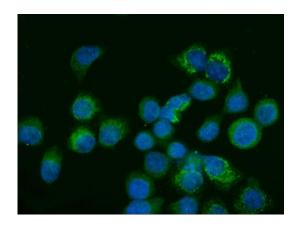
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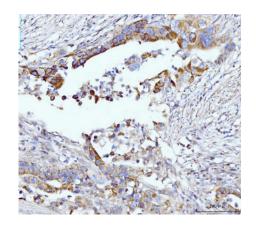
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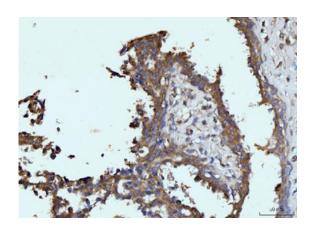




IF analysis of Glutaminase/GLS using anti-Glutaminase/GLS antibody. Glutaminase/GLS was detected in an immunocytochemical section of SiHa cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5  $\mu$ g/mL mouse anti-Glutaminase/GLS Antibody overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC analysis of Glutaminase/GLS using anti-Glutaminase/GLS antibody. Glutaminase/GLS was detected in a paraffinembedded section of human appendiceal adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2  $\mu$ g/ml mouse anti-Glutaminase/GLS Antibody overnight at 4°C. Biotinylated goat anti-mouse lgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC analysis of Glutaminase/GLS using anti-Glutaminase/GLS antibody. Glutaminase/GLS was detected in a paraffinembedded section of human breast cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2  $\mu$ g/ml mouse anti-Glutaminase/GLS Antibody overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

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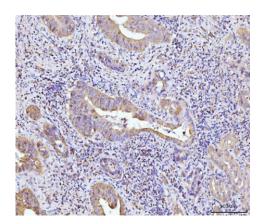
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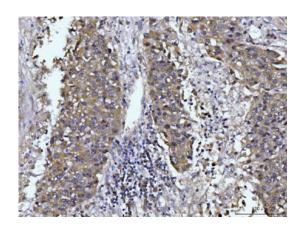
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IHC analysis of Glutaminase/GLS using anti-Glutaminase/GLS antibody. Glutaminase/GLS was detected in a paraffinembedded section of human gall bladder adenosquamous carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2  $\mu$ g/ml mouse anti-Glutaminase/GLS Antibody overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC analysis of Glutaminase/GLS using anti-Glutaminase/GLS antibody. Glutaminase/GLS was detected in a paraffinembedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2  $\mu$ g/ml mouse anti-Glutaminase/GLS Antibody overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

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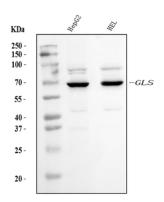
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Western blot analysis of Glutaminase/GLS using anti-Glutaminase/GLS antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HepG2 whole cell lysates, Lane 2: human HEL whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-Glutaminase/GLS antigen affinity purified monoclonal antibody at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Glutaminase/GLS at approximately 56-73 kDa. The expected band size for Glutaminase/GLS is at 73 kDa.

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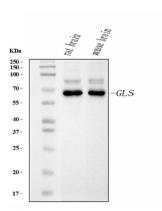
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