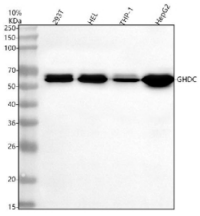
GHDC Antibody / GH3 domain-containing protein (FY12194)

Catalog No.	Formulation	Size
FY12194	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q8N2G8
Applications	Western Blot: 0.25-0.5ug/ml ELISA: 0.1-0.5ug/ml
Limitations	This GHDC antibody is available for research use only.



Western blot analysis of GHDC using anti-GHDC antibody. Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: human 293T whole cell lysates, Lane 2: human HEL whole cell lysates, Lane 3: human THP-1 whole cell lysates, Lane 4: human HepG2 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 rabbit anti-GHDC antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using an ECL Plus Western Blotting Substrate. A specific band was detected for GHDC at approximately 54 kDa. The expected band size for GHDC is at 54 kDa.

Description

GHDC antibody detects GH3 domain-containing protein, encoded by the GHDC gene on chromosome 5q31.3. GHDC antibody is used in studies of protein-protein interactions, signaling pathways, and developmental biology. GHDC is a

relatively uncharacterized protein thought to play roles in cellular signaling and scaffolding functions through its GH3 domain, which mediates interactions with other signaling proteins. Expression is observed in multiple tissues, including brain, liver, kidney, and immune cells, suggesting broad biological roles.

Structurally, GHDC contains a conserved GH3 domain, originally identified in proteins involved in signaling and cytoskeletal organization. The GH3 domain enables GHDC to act as an adaptor protein, linking signaling molecules within cellular pathways. The protein also contains coiled-coil motifs that may support oligomerization or interactions with structural proteins. These features position GHDC as a potential mediator of cytoskeletal and signaling regulation.

Functionally, GHDC is predicted to participate in cytoskeletal organization, vesicle trafficking, and intracellular signaling. While detailed functions are still under investigation, experimental data suggest GHDC influences processes such as cell migration, adhesion, and signal transduction. Knockdown or mutation may disrupt these pathways, although phenotypic outcomes are not yet well defined. Researchers apply GHDC antibody to explore the roles of novel domain-containing proteins and their integration into known signaling networks.

Clinically, GHDC remains underexplored, but variants have been identified in genetic screens of developmental disorders and neurological disease. Genome-wide association studies have linked GHDC locus variants to neuropsychiatric traits, though causality remains to be determined. Altered expression of GHDC has been observed in some cancers, hinting at roles in proliferation or migration. Ongoing research aims to define its contributions to disease. NSJ Bioreagents supplies GHDC antibody to support early-stage research on this uncharacterized protein.

Experimentally, GHDC antibody is used in western blotting to detect the ~90 kDa protein, in immunofluorescence microscopy to study localization, and in immunohistochemistry to assess tissue expression. Immunoprecipitation with GHDC antibody allows identification of potential binding partners and domain-mediated interactions.

Application Notes

Optimal dilution of the GHDC antibody should be determined by the researcher.

Immunogen

E.coli-derived human GHDC recombinant protein (Position: E108-S426) was used as the immunogen for the GHDC antibody.

Storage

After reconstitution, the GHDC antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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