

# Anti-GWL Antibody [PSH07-69]

HA722884



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human, Monkey
<b>Applications:</b>	WB, IF-Cell, IP
<b>Molecular Wt:</b>	Predicted band size: 97 kDa
<b>Clone number:</b>	PSH07-69

**Description:** Serine/threonine kinase that plays a key role in M phase by acting as a regulator of mitosis entry and maintenance. Acts by promoting the inactivation of protein phosphatase 2A (PP2A) during M phase: does not directly inhibit PP2A but acts by mediating phosphorylation and subsequent activation of ARPP19 and ENSA at 'Ser-62' and 'Ser-67', respectively. ARPP19 and ENSA are phosphatase inhibitors that specifically inhibit the PPP2R2D (PR55-delta) subunit of PP2A. Inactivation of PP2A during M phase is essential to keep cyclin-B1-CDK1 activity high. Following DNA damage, it is also involved in checkpoint recovery by being inhibited. Phosphorylates histone protein in vitro; however such activity is unsure in vivo. May be involved in megakaryocyte differentiation.

**Immunogen:** Recombinant protein within human GWL aa 1-350.

**Positive control:** HeLa cell lysate, LNCaP cell lysate, HepG2 cell lysate, MDA-MB-231 cell lysate, COS-1 cell lysate, HeLa.

**Subcellular location:** Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, Nucleus, Cleavage furrow.

**Database links:** SwissProt: Q96GX5 Human

**Recommended Dilutions:**

<b>WB</b>	1:2,000
<b>IF-Cell</b>	1:50
<b>IP</b>	1-2µg/sample

**Storage Buffer:** PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

**Storage Instruction:** Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

**Purity:** Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

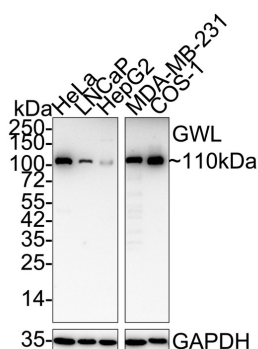
Technical:0086-571-89986345

Service mail:support@huabio.cn

 华安生物  
HUABIO  
www.huabio.cn

## Images

**Fig1:** Western blot analysis of GWL on different lysates with Rabbit anti-GWL antibody (HA722884) at 1/2,000 dilution.



Lane 1: HeLa cell lysate  
 Lane 2: LNCaP cell lysate  
 Lane 3: HepG2 cell lysate  
 Lane 4: MDA-MB-231 cell lysate  
 Lane 5: COS-1 cell lysate

Lysates/proteins at 20 µg/Lane.

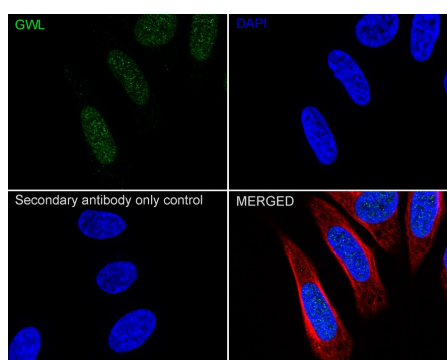
Predicted band size: 97 kDa  
 Observed band size: 110 kDa

Exposure time: 59 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA722884) at 1/2,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

**Fig2:** Immunocytochemistry analysis of HeLa cells labeling GWL with Rabbit anti-GWL antibody (HA722884) at 1/50 dilution.



Cells were fixed in 4% paraformaldehyde for 15 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-GWL antibody (HA722884) at 1/50 dilution in 1% BSA in PBST overnight at 4 °C. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/50 dilution overnight at +4°C. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

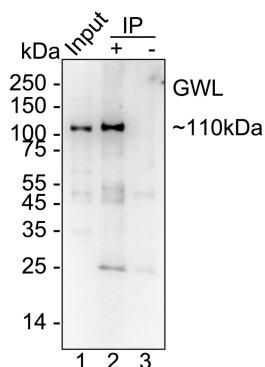
Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物  
 HUABIO  
 www.huabio.cn



**Fig3:** GWL was immunoprecipitated from 0.2 mg HeLa cell lysate with HA722884 at 2  $\mu\text{g}/10 \mu\text{l}$  beads. Western blot was performed from the immunoprecipitate using HA722884 at 1/1,000 dilution. Anti-Rabbit IgG for IP Nano-secondary antibody (NBI01H) at 1/5,000 dilution was used for 1 hour at room temperature.

Lane 1: HeLa cell lysate (input)

Lane 2: HA722884 IP in HeLa cell lysate

Lane 3: Rabbit IgG instead of HA722884 in HeLa cell lysate

Blocking/Dilution buffer: 5% NFDM/TBST

Exposure time: 40 seconds; ECL: K1802

**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

### Background References

1. Gall-Duncan T et al. Antagonistic roles of canonical and Alternative-RPA in disease-associated tandem CAG repeat instability. *Cell*. 2023 Oct.
2. Yang J et al. Sequential genome-wide CRISPR-Cas9 screens identify genes regulating cell-surface expression of tetraspanins. *Cell Rep*. 2023 Feb.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物  
HUABIO  
www.huabio.cn