

# Anti-SEC61B Antibody [PSH09-48]

HA723110



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human, Mouse, Rat
<b>Applications:</b>	WB, IHC-P, IF-Cell, IP, IF-Tissue
<b>Molecular Wt:</b>	Predicted band size: 10 kDa
<b>Clone number:</b>	PSH09-48

**Description:** The Sec61 complex is the central component of the protein translocation apparatus of the endoplasmic reticulum (ER) membrane. The Sec61 complex forms a transmembrane channel where proteins are translocated across and integrated into the ER membrane. This complex consists of three membrane proteins- alpha, beta, and gamma. This gene encodes the beta-subunit protein. The Sec61 subunits are also observed in the post-ER compartment, suggesting that these proteins can escape the ER and recycle back. There is evidence for multiple polyadenylated sites for this transcript.

**Immunogen:** Recombinant protein within human SEC61B aa 1-96/96

**Positive control:** HeLa cell lysate, HepG2 cell lysate, C2C12 cell lysate, C6 cell lysate, Bxpc-3 cell lysate, Mouse liver tissue lysate, Rat liver tissue lysate, C2C12, human liver tissue, mouse liver tissue, rat liver tissue, human brain tissue, human cervical cancer tissue, mouse brain tissue, mouse hippocampus tissue, mouse cerebellum tissue, mouse pancreas tissue, rat brain tissue, rat pancreas tissue.

**Subcellular location:** Endoplasmic reticulum membrane

**Database links:** SwissProt: P60468 Human | Q9CQS8 Mouse | F7F271 Rat

**Recommended Dilutions:**

<b>WB</b>	1:2,000-1:5,000
<b>IHC-P</b>	1:200-1:1,000
<b>IF-Cell</b>	1:100
<b>IP</b>	1-2µg/sample
<b>IF-Tissue</b>	1:200

**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.

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Orders:0086-571-88062880

Technical:0086-571-89986345

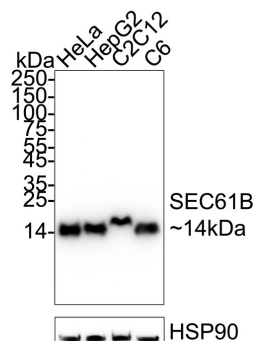
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## Images

**Fig1:** Western blot analysis of SEC61B on different lysates with Rabbit anti-SEC61B antibody (HA723110) at 1/5,000 dilution.

Lane 1: HeLa cell lysate  
Lane 2: HepG2 cell lysate  
Lane 3: C2C12 cell lysate  
Lane 4: C6 cell lysate



Lysates/proteins at 20 µg/Lane.

Predicted band size: 10 kDa  
Observed band size: 14 kDa

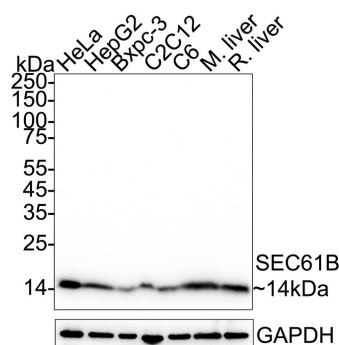
Exposure time: 6 seconds; ECL: K1801;

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 (HA723110) at 1/5,000 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:** Western blot analysis of SEC61B on different lysates with Rabbit anti-SEC61B antibody (HA723110) at 1/2,000 dilution.

Lane 1: HeLa cell lysate (20 µg/Lane)  
Lane 2: HepG2 cell lysate (20 µg/Lane)  
Lane 3: Bxpc-3 cell lysate (20 µg/Lane)  
Lane 4: C2C12 cell lysate (20 µg/Lane)  
Lane 5: C6 cell lysate (20 µg/Lane)  
Lane 6: Mouse liver tissue lysate (40 µg/Lane)  
Lane 7: Rat liver tissue lysate (40 µg/Lane)



Predicted band size: 10 kDa  
Observed band size: 14 kDa

Exposure time: 7 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 (HA723110) 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.

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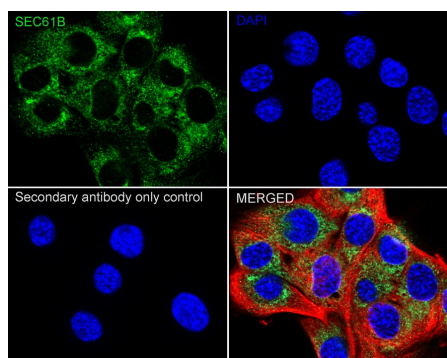
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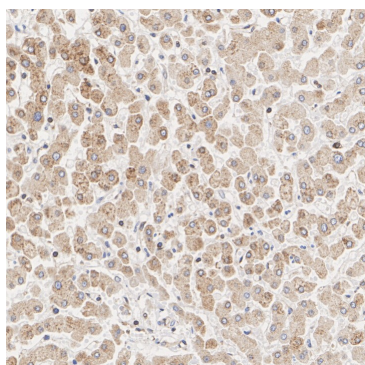
**Fig3:** Immunocytochemistry analysis of C2C12 cells labeling SEC61B with Rabbit anti-SEC61B antibody (HA723110) at 1/100 dilution.



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-SEC61B antibody (HA723110) at 1/100 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.

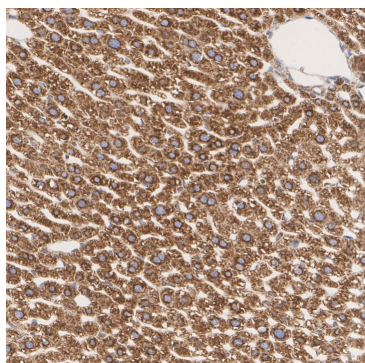
Beta tubulin (HA601187, red) was stained at 1/100 dilution overnight at +4 °C. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

**Fig4:** Immunohistochemical analysis of paraffin-embedded human liver tissue with Rabbit anti-SEC61B antibody (HA723110) at 1/200 dilution.

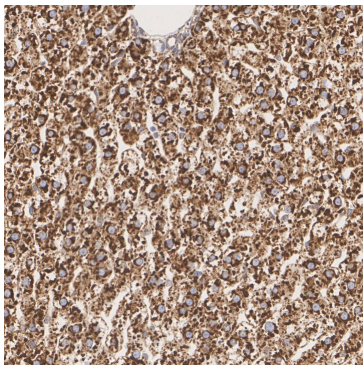


The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA723110) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

**Fig5:** Immunohistochemical analysis of paraffin-embedded mouse liver tissue with Rabbit anti-SEC61B antibody (HA723110) at 1/200 dilution.

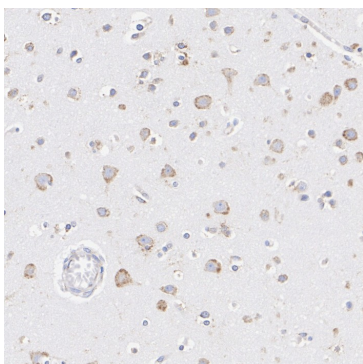


The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA723110) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



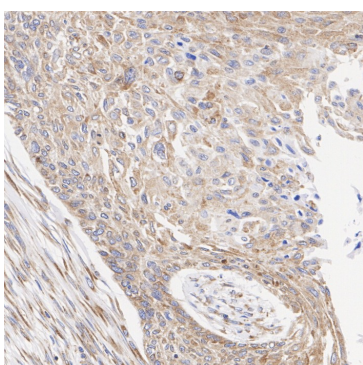
**Fig6:** Immunohistochemical analysis of paraffin-embedded rat liver tissue with Rabbit anti-SEC61B antibody (HA723110) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA723110) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



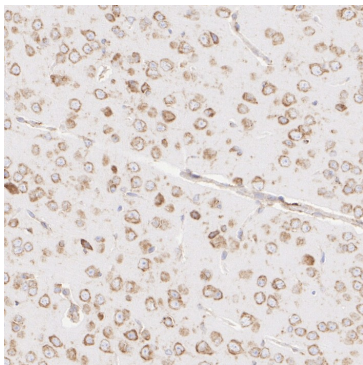
**Fig7:** Immunohistochemical analysis of paraffin-embedded human brain tissue with Rabbit anti-SEC61B antibody (HA723110) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA723110) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



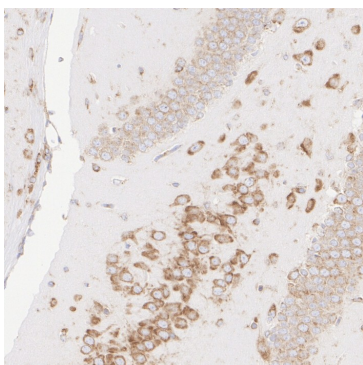
**Fig8:** Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue with Rabbit anti-SEC61B antibody (HA723110) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA723110) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



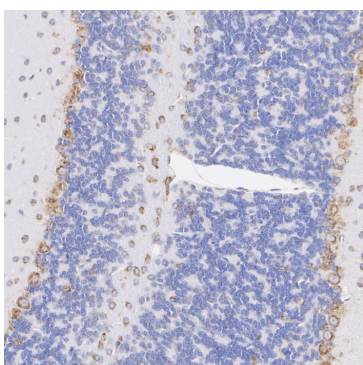
**Fig9:** Immunohistochemical analysis of paraffin-embedded mouse brain tissue with Rabbit anti-SEC61B antibody (HA723110) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA723110) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



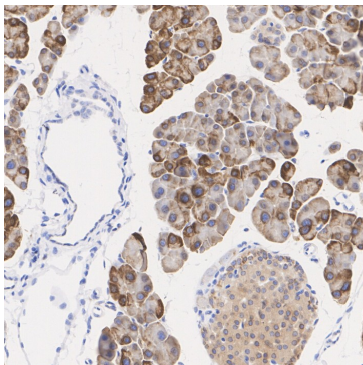
**Fig10:** Immunohistochemical analysis of paraffin-embedded mouse hippocampus tissue with Rabbit anti-SEC61B antibody (HA723110) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA723110) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



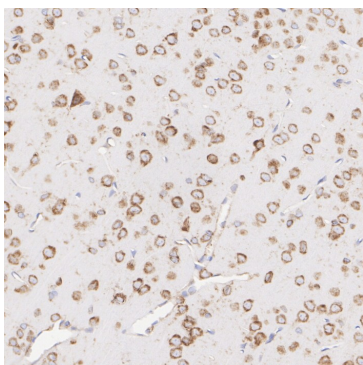
**Fig11:** Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue with Rabbit anti-SEC61B antibody (HA723110) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA723110) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



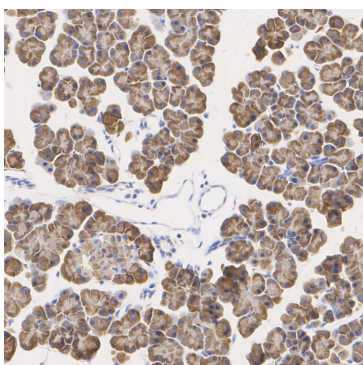
**Fig12:** Immunohistochemical analysis of paraffin-embedded mouse pancreas tissue with Rabbit anti-SEC61B antibody (HA723110) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA723110) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



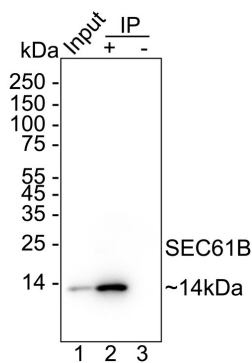
**Fig13:** Immunohistochemical analysis of paraffin-embedded rat brain tissue with Rabbit anti-SEC61B antibody (HA723110) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA723110) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



**Fig14:** Immunohistochemical analysis of paraffin-embedded rat pancreas tissue with Rabbit anti-SEC61B antibody (HA723110) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA723110) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



**Fig15:** SEC61B was immunoprecipitated from 0.2 mg HeLa cell lysate with HA723110 at 2  $\mu$ g/10  $\mu$ l beads. Western blot was performed from the immunoprecipitate using HA723110 at 1/2,000 dilution. Mouse Anti-Rabbit IgG kappa light chain secondary antibody (M1208-2) at 1/5,000 dilution was used for 1 hour at room temperature.

Lane 1: HeLa cell lysate (input)

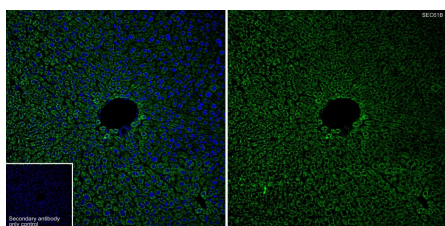
Lane 2: HA723110 IP in HeLa cell lysate

Lane 3: Rabbit IgG instead of HA723110 in HeLa cell lysate

Blocking/Dilution buffer: 5% NFDm/TBST

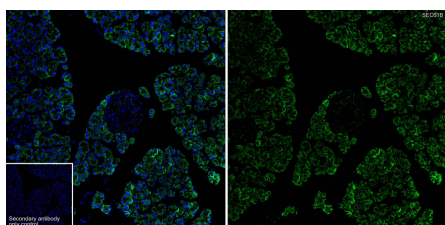
Exposure time: 2 seconds; ECL: K1801

**Fig16:** Immunofluorescence analysis of paraffin-embedded mouse liver tissue labeling SEC61B with Rabbit anti-SEC61B antibody (HA723110) at 1/200 dilution.



The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (HA723110, green) at 1/200 dilution overnight at 4  $^{\circ}$ C, washed with PBS. Goat Anti-Rabbit IgG H&L (iFluor<sup>TM</sup> 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

**Fig17:** Immunofluorescence analysis of paraffin-embedded rat pancreas tissue labeling SEC61B with Rabbit anti-SEC61B antibody (HA723110) at 1/200 dilution.



The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (HA723110, green) at 1/200 dilution overnight at 4  $^{\circ}$ C, washed with PBS. Goat Anti-Rabbit IgG H&L (iFluor<sup>TM</sup> 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

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

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### Background References

1. Kong X Y ,Rehan R ,Moreno L C , et al.SEC61B Regulates Calcium Flux and Platelet Hyperactivity in Diabetes Mellitus[J].Blood,2023,142(S1):680-680.
2. Eshelman S ,Haggerty K ,Humbert M , et al.Mapping the Endoplasmic Reticulum and Rhodopsin Biosynthesis in Rod Photoreceptor Neurons Using Super-Resolution Microscopy[J].Investigative Ophthalmology & Visual Science,2023,64(8):3228-3228.

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