

# Anti-ACSL4 / FACL4 Antibody [JE56-33]

ET7111-43



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human, Mouse, Rat
<b>Applications:</b>	WB, IHC-P
<b>Molecular Wt:</b>	Predicted band size: 79 kDa
<b>Clone number:</b>	JE56-33

**Description:** The protein encoded by this gene is an isozyme of the long-chain fatty-acid-coenzyme A ligase family. Although differing in substrate specificity, subcellular localization, and tissue distribution, all isozymes of this family convert free long-chain fatty acids into fatty acyl-CoA esters, and thereby play a key role in lipid biosynthesis and fatty acid degradation. This isozyme preferentially utilizes arachidonate as substrate. The absence of this enzyme may contribute to the cognitive disability or Alport syndrome. Alternative splicing of this gene generates multiple transcript variants.

**Immunogen:** Recombinant protein within human FACL4 aa 561-711 (Cytoplasmic).

**Positive control:** PC-12 cell lysate, C6 cell lysate, L6 cell lysate, Rat brain tissue lysate, Rat lung tissue lysate, Rat thymus tissue lysate, A549 cell lysate, Mouse brain tissue lysate, mouse brain tissue, mouse lung tissue, rat brain tissue.

**Subcellular location:** Peroxisome membrane, Mitochondrion outer membrane, Microsome membrane, Endoplasmic reticulum membrane, Cell membrane.

**Database links:** SwissProt: O60488 Human | Q9QUJ7 Mouse | O35547 Rat

**Recommended Dilutions:**

<b>WB</b>	1:1,000-1:5,000
<b>IHC-P</b>	1:1,000

**Storage Buffer:** 1\*TBS (pH7.4), 0.05% 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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Technical:0086-571-89986345

Service mail:support@huabio.cn

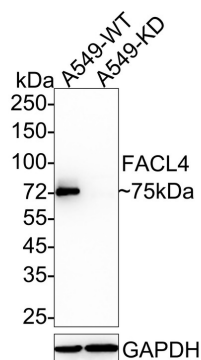
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## Images

**Fig1:** Western blot analysis of ACSL4 / FACL4 on different lysates with Rabbit anti-ACSL4 / FACL4 antibody (ET7111-43) at 1/5,000 dilution.

Lane 1: A549-si NT cell lysate

Lane 2: A549-si ACSL4 / FACL4 cell lysate



Lysates/proteins at 10 µg/Lane.

Predicted band size: 79 kDa

Observed band size: 75 kDa

Exposure time: 1 minute; 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 (ET7111-43) 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 ACSL4 / FACL4 on different lysates with Rabbit anti-ACSL4 / FACL4 antibody (ET7111-43) at 1/1,000 dilution.

Lane 1: PC-12 cell lysate

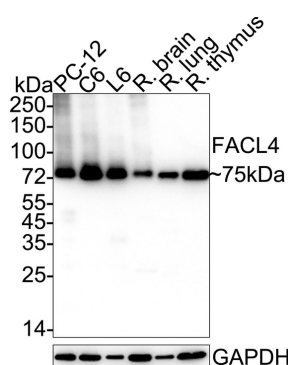
Lane 2: C6 cell lysate

Lane 3: L6 cell lysate

Lane 4: Rat brain tissue lysate

Lane 5: Rat lung tissue lysate

Lane 6: Rat thymus tissue lysate



Lysates/proteins at 20 µg/Lane.

Predicted band size: 79 kDa

Observed band size: 75 kDa

Exposure time: 42 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 (ET7111-43) at 1/1,000 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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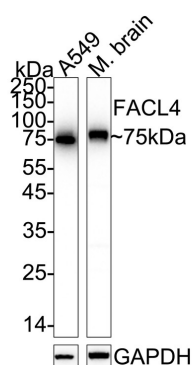
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**Fig3:** Western blot analysis of ACSL4 / FACL4 on different lysates with Rabbit anti-ACSL4 / FACL4 antibody (ET7111-43) at 1/1,000 dilution.

Lane 1: A549 cell lysate (20 µg/Lane)

Lane 2: Mouse brain tissue lysate (40 µg/Lane)



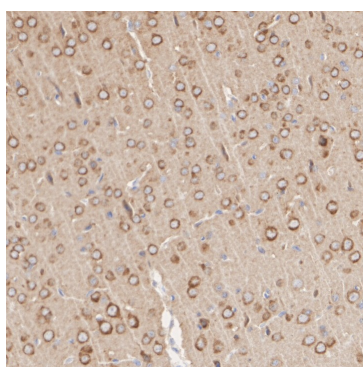
Predicted band size: 79 kDa

Observed band size: 75 kDa

Exposure time: 25 seconds; ECL: K1801;

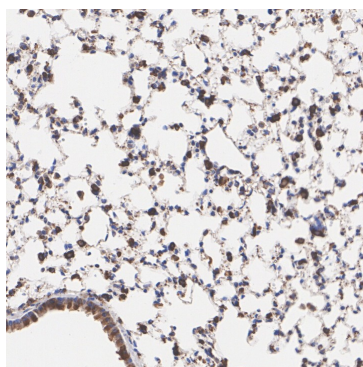
4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDN/TBST for 1 hour at room temperature. The primary antibody (ET7111-43) at 1/1,000 dilution was used in 5% NFDN/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.



**Fig4:** Immunohistochemical analysis of paraffin-embedded mouse brain tissue with Rabbit anti-ACSL4 / FACL4 antibody (ET7111-43) 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 (ET7111-43) 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.



**Fig5:** Immunohistochemical analysis of paraffin-embedded mouse lung tissue with Rabbit anti-ACSL4 / FACL4 antibody (ET7111-43) 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 (ET7111-43) 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.

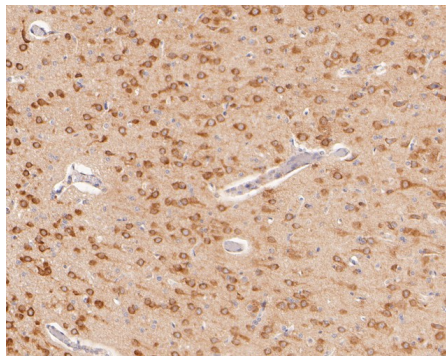
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**Fig6:** Immunohistochemical analysis of paraffin-embedded rat brain tissue using anti-ACSL4 / FACL4 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (ET7111-43, 1/200) for 30 minutes 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.

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

### Background References

1. Cheng J. et. al. ACSL4 suppresses glioma cells proliferation via activating ferroptosis. *Oncol Rep.* 2020 Jan
2. Kuwata H. et. al. Role of acyl-CoA synthetase ACSL4 in arachidonic acid metabolism. *Prostaglandins Other Lipid Mediat.* 2019 Oct

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