

**Anti-SH3GL2 Antibody Picoband™ (monoclonal, 6I8E1)**  
Catalog # ABO16586

**Specification**

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**Anti-SH3GL2 Antibody Picoband™ (monoclonal, 6I8E1) - Product Information**

Application	WB
Primary Accession	<a href="#">Q99962</a>
Host	Mouse
Isotype	Mouse IgG2a
Reactivity	Rat, Mouse
Clonality	Monoclonal
Format	Lyophilized

**Description**

Anti-SH3GL2 Antibody Picoband™ (monoclonal, 6I8E1) . Tested in WB applications. This antibody reacts with Mouse, Rat.

**Reconstitution**

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

**Anti-SH3GL2 Antibody Picoband™ (monoclonal, 6I8E1) - Additional Information**

**Gene ID** 6456

**Other Names**

Endophilin-A1, EEN-B1, Endophilin-1, SH3 domain protein 2A, SH3 domain-containing GRB2-like protein 2, SH3GL2, CNSA2, SH3D2A

**Calculated MW**

40 kDa KDa

**Application Details**

Western blot, 0.25-0.5 µg/ml, Mouse, Rat<br>

**Contents**

Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na<sub>2</sub>HPO<sub>4</sub>.

**Immunogen**

E.coli-derived human SH3GL2 recombinant protein (Position: R65-Q292).

**Purification**

Immunogen affinity purified.

**Storage**

**At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.**

**Anti-SH3GL2 Antibody Picoband™ (monoclonal, 6I8E1) - Protein Information**

**Name** SH3GL2

**Synonyms** CNSA2, SH3D2A

**Function**

Implicated in synaptic vesicle endocytosis. May recruit other proteins to membranes with high curvature. Required for BDNF-dependent dendrite outgrowth. Cooperates with SH3GL2 to mediate BDNF-NTRK2 early endocytic trafficking and signaling from early endosomes.

**Cellular Location**

Cytoplasm {ECO:0000250|UniProtKB:O35179}. Membrane {ECO:0000250|UniProtKB:O35179}; Peripheral membrane protein {ECO:0000250|UniProtKB:O35179}. Early endosome {ECO:0000250|UniProtKB:Q62420}. Presynapse {ECO:0000250|UniProtKB:O35179}

**Tissue Location**

Brain, mostly in frontal cortex. Expressed at high level in fetal cerebellum

**Anti-SH3GL2 Antibody Picoband™ (monoclonal, 6I8E1) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-SH3GL2 Antibody Picoband™ (monoclonal, 6I8E1) - Images**

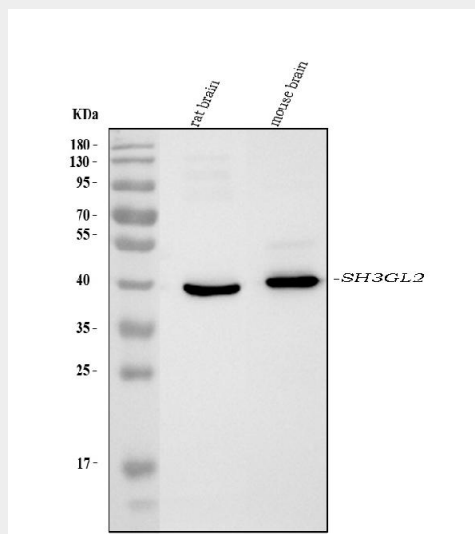


Figure 1. Western blot analysis of SH3GL2 using anti-SH3GL2 antibody (M05430). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat brain tissue lysates,  
Lane 2: mouse brain tissue 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-SH3GL2 antigen affinity purified monoclonal antibody (Catalog # M05430) 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 (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for SH3GL2 at approximately 40 kDa. The expected band size for SH3GL2 is at 40 kDa.

#### **Anti-SH3GL2 Antibody Picoband™ (monoclonal, 618E1) - Background**

Endophilin-A1 is a protein that in humans is encoded by the SH3GL2 gene. Endophilin proteins are part of a large family of Bin/Amphiphysin/Rvs (BAR) domain proteins that are involved in cell membrane remodeling. The endophilins are encoded by five genes, which produce endophilin A 1-3 and B 1-2. Endophilins are involved in many cellular mechanisms, such as synaptic vesicle recycling, receptor trafficking, and membrane remodeling processes. Research studies indicate that endophilin 1 (endophilin A1, SH3GL2) can induce different membrane shapes and participate in the morphogenesis of dendritic spines. Endophilin 1 is also involved in regulating blood brain barrier permeability via the EGFR-JNK pathway.