

## Anti-PEN2 Rabbit Monoclonal Antibody Catalog # ABO15489

### Specification

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#### Anti-PEN2 Rabbit Monoclonal Antibody - Product Information

Application	WB, IHC, IF, ICC, FC
Primary Accession	<a href="#">Q9NZ42</a>
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

#### Description

Anti-PEN2 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

#### Anti-PEN2 Rabbit Monoclonal Antibody - Additional Information

**Gene ID** 55851

#### Other Names

Gamma-secretase subunit PEN-2, Presenilin enhancer protein 2, PSENER, PEN2

#### Calculated MW

13 kDa KDa

#### Application Details

WB 1:500-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>FC 1:50

#### Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

#### Immunogen

A synthesized peptide derived from human PEN2

#### Purification

Affinity-chromatography

#### Storage

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

#### Anti-PEN2 Rabbit Monoclonal Antibody - Protein Information

**Name** PSENER

## Synonyms PEN2

### Function

Essential subunit of the gamma-secretase complex, an endoprotease complex that catalyzes the intramembrane cleavage of integral membrane proteins such as Notch receptors and APP (amyloid- beta precursor protein) (PubMed:<a href="http://www.uniprot.org/citations/12522139" target="\_blank">12522139</a>, PubMed:<a href="http://www.uniprot.org/citations/12679784" target="\_blank">12679784</a>, PubMed:<a href="http://www.uniprot.org/citations/12740439" target="\_blank">12740439</a>, PubMed:<a href="http://www.uniprot.org/citations/12763021" target="\_blank">12763021</a>, PubMed:<a href="http://www.uniprot.org/citations/24941111" target="\_blank">24941111</a>, PubMed:<a href="http://www.uniprot.org/citations/30598546" target="\_blank">30598546</a>, PubMed:<a href="http://www.uniprot.org/citations/30630874" target="\_blank">30630874</a>). The gamma-secretase complex plays a role in Notch and Wnt signaling cascades and regulation of downstream processes via its role in processing key regulatory proteins, and by regulating cytosolic CTNNB1 levels (Probable). PSENEN modulates both endoproteolysis of presenilin and gamma-secretase activity (PubMed:<a href="http://www.uniprot.org/citations/12522139" target="\_blank">12522139</a>, PubMed:<a href="http://www.uniprot.org/citations/12679784" target="\_blank">12679784</a>, PubMed:<a href="http://www.uniprot.org/citations/12740439" target="\_blank">12740439</a>, PubMed:<a href="http://www.uniprot.org/citations/12763021" target="\_blank">12763021</a>, PubMed:<a href="http://www.uniprot.org/citations/24941111" target="\_blank">24941111</a>).

### Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus, Golgi stack membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Membrane; Multi-pass membrane protein Note=Predominantly located in the endoplasmic reticulum and in the cis- Golgi.

### Tissue Location

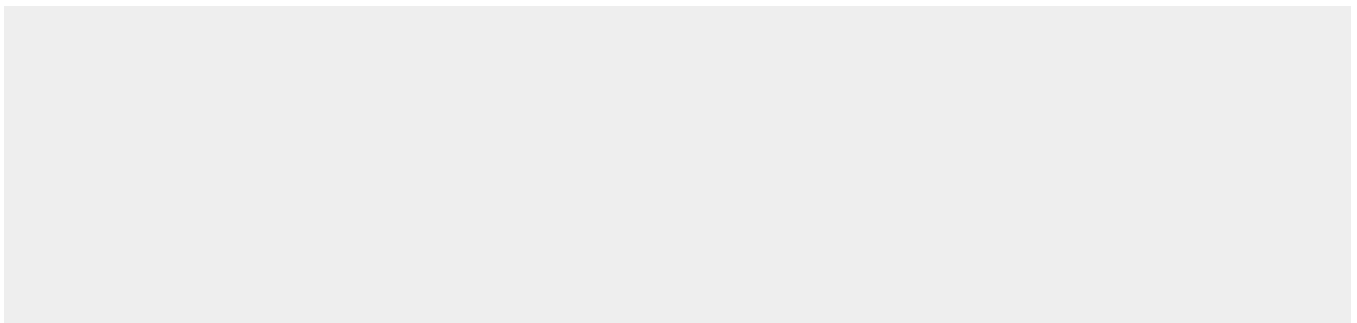
Widely expressed. Expressed in leukocytes, lung, placenta, small intestine, liver, kidney, spleen thymus, skeletal muscle, heart and brain.

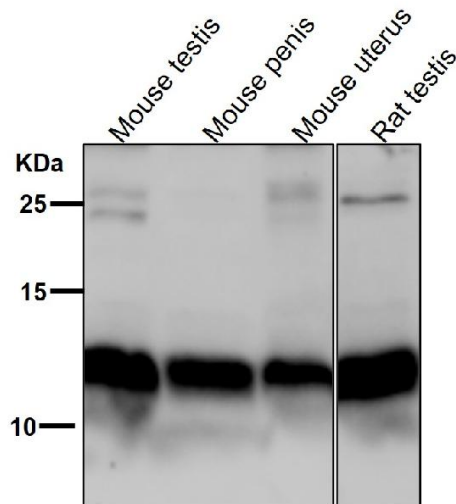
## Anti-PEN2 Rabbit Monoclonal Antibody - Protocols

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-PEN2 Rabbit Monoclonal Antibody - Images





All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.

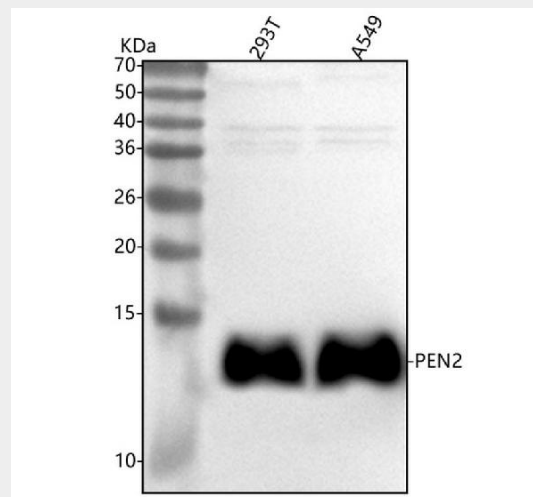


Figure 1. Western blot analysis of PEN2 using anti-PEN2 antibody (M04504-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human 293T whole cell lysates,  
 Lane 2: human A549 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-PEN2 antigen affinity purified monoclonal antibody (Catalog # M04504-1) at 1:500 overnight at 4°C, 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 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PEN2 at approximately 12 kDa. The expected band size for PEN2 is at 12 kDa.