

**CPNE1 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP55386**

**Specification**

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**CPNE1 Polyclonal Antibody - Product Information**

Application	<b>WB, IHC-P, IHC-F, IF, ICC, E</b>
Primary Accession	<a href="#">O99829</a>
Reactivity	<b>Rat, Pig, Bovine</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>59 KDa</b>
Physical State	<b>Liquid</b>
Immunogen	<b>KLH conjugated synthetic peptide derived from human CPNE1</b>
Epitope Specificity	<b>1-120/537</b>
Isotype	<b>IgG</b>
<b>Purity</b>	
affinity purified by Protein A	
Buffer	<b>0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.</b>
SIMILARITY	<b>Belongs to the copine family. Contains 2 C2 domains. Contains 1 VWFA domain.</b>
SUBUNIT	<b>Interacts with CCDC22.</b>
Important Note	<b>This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.</b>

**Background Descriptions**

Copine I is a member of the copine family of evolutionarily conserved, soluble, calcium-dependent, membrane-binding proteins. Members of the copine family are involved in signal transduction and membrane trafficking. Copine I is ubiquitously expressed and contains two N-terminal C2 domains and one C-terminal VWFA (von Willebrand factor A) domain, which is also referred to as the A domain or the core domain. As is characteristic of the copine family, copine I functions in membrane trafficking and is capable of binding phospholipids in a calcium-dependent manner. Copine I is also able to bind liposomes. Via its VWFA domain, copine I directly interacts with the ubiquitin-conjugating enzyme, UBC12, and may play a role in the regulation of TNF alpha-signaling.

**CPNE1 Polyclonal Antibody - Additional Information**

**Gene ID 8904**

**Other Names**

Copine-1, Chromobindin 17, Copine I {ECO:0000303|PubMed:9430674, ECO:0000312|HGNC:HGNC:2314}, CPNE1 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=2314" target="\_blank">HGNC:2314</a>), CPN1

**Dilution**

<span class = "dilution\_WB">WB~~1:1000</span><br \><span class = "dilution\_IHC-P">IHC-P~~N/A</span><br \><span class = "dilution\_IHC-F">IHC-F~~N/A</span><br \><span class = "dilution\_IF">IF~~1:50~200</span><br \><span class = "dilution\_ICC">ICC~~N/A</span><br \><span class = "dilution\_E">E~~N/A</span>

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**CPNE1 Polyclonal Antibody - Protein Information**

**Name** CPNE1 ([HGNC:2314](#))

**Synonyms** CPN1

**Function**

Calcium-dependent phospholipid-binding protein that plays a role in calcium-mediated intracellular processes (PubMed:<a href="http://www.uniprot.org/citations/14674885" target="\_blank">14674885</a>). Involved in the TNF-alpha receptor signaling pathway in a calcium- dependent manner (PubMed:<a href="http://www.uniprot.org/citations/14674885" target="\_blank">14674885</a>). Exhibits calcium-dependent phospholipid binding properties (PubMed:<a href="http://www.uniprot.org/citations/19539605" target="\_blank">19539605</a>, PubMed:<a href="http://www.uniprot.org/citations/9430674" target="\_blank">9430674</a>). Plays a role in neuronal progenitor cell differentiation; induces neurite outgrowth via a AKT-dependent signaling cascade and calcium- independent manner (PubMed:<a href="http://www.uniprot.org/citations/23263657" target="\_blank">23263657</a>, PubMed:<a href="http://www.uniprot.org/citations/25450385" target="\_blank">25450385</a>). May recruit target proteins to the cell membrane in a calcium-dependent manner (PubMed:<a href="http://www.uniprot.org/citations/12522145" target="\_blank">12522145</a>). May function in membrane trafficking (PubMed:<a href="http://www.uniprot.org/citations/9430674" target="\_blank">9430674</a>). Involved in TNF-alpha-induced NF-kappa-B transcriptional repression by inducing endoprotease processing of the transcription factor NF-kappa-B p65/RELA subunit (PubMed:<a href="http://www.uniprot.org/citations/18212740" target="\_blank">18212740</a>). Also induces endoprotease processing of NF-kappa-B p50/NFKB1, p52/NFKB2, RELB and REL (PubMed:<a href="http://www.uniprot.org/citations/18212740" target="\_blank">18212740</a>).

**Cellular Location**

Nucleus. Cytoplasm. Cell membrane Note=Translocates to the cell membrane in a calcium-dependent manner (PubMed:21087455, PubMed:25450385).

**Tissue Location**

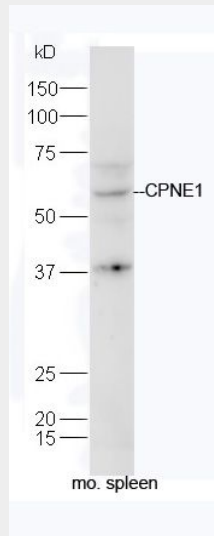
Expressed in neutrophils (at protein level) (PubMed:12949241). Widely expressed. Expressed in the brain. Expressed in neutrophil precursors from bone marrow and peripheral blood (PubMed:12949241).

**CPNE1 Polyclonal Antibody - Protocols**

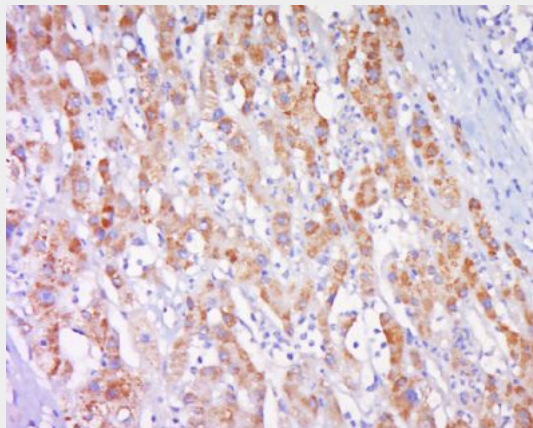
Provided below are standard protocols that you may find useful for product applications.

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

### CPNE1 Polyclonal Antibody - Images

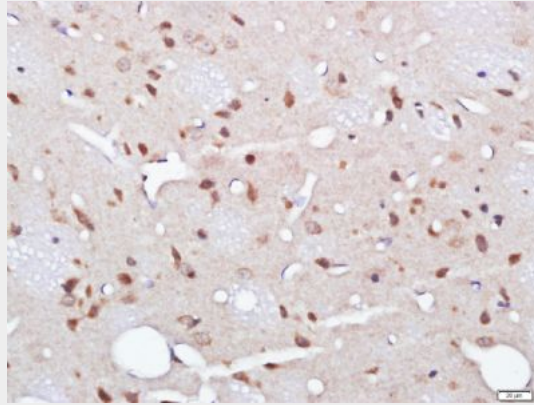


Protein: spleen(mouse) lysate at 40ug;  
Primary: rabbit Anti-CPNE1 (bs-14024R) at 1:300;  
Secondary: HRP conjugated Goat-Anti-rabbit IgG(bs-0295G-HRP) at 1: 5000;  
Predicted band size: 59 kD  
Observed band size: 59 kD

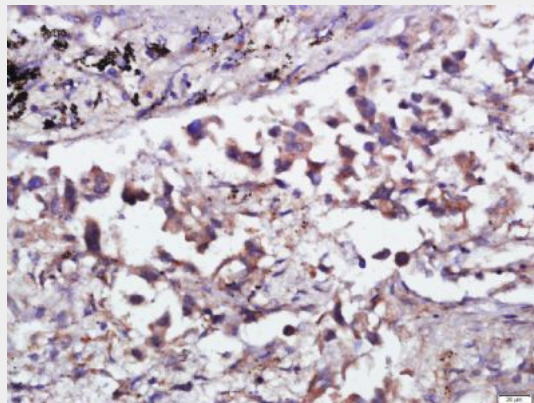


Tissue/cell: human liver carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;  
Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;  
Incubation: Anti-CPNE1 Polyclonal Antibody, Unconjugated(bs-14024R) 1:500, overnight at 4°C,

followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: Rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;  
Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;  
Incubation: Anti-CPNE1 Polyclonal Antibody, Unconjugated(bs-14024R) 1:400, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: human lung carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;  
Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;  
Incubation: Anti-CPNE1 Polyclonal Antibody, Unconjugated(bs-14024R) 1:400, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining