

# **CPNE1** Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55386

## **Product Information**

Application Primary Accession Reactivity Host Clonality Calculated MW Physical State Immunogen Epitope Specificity Isotype Purity	WB, IHC-P, IHC-F, IF, ICC, E Q99829 Rat, Pig, Bovine Rabbit Polyclonal 59059 Liquid KLH conjugated synthetic peptide derived from human CPNE1 1-120/537 IgG affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the copine family. Contains 2 C2 domains. Contains 1 VWFA domain.
SUBUNIT	Interacts with CCDC22.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
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.

### **Additional Information**

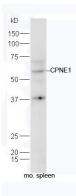
Gene ID	8904
Other Names	Copine-1, Chromobindin 17, Copine I {ECO:0000303 PubMed:9430674, ECO:0000312 HGNC:HGNC:2314}, CPNE1 ( <u>HGNC:2314</u> ), CPN1
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-50 0,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

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.

#### **Protein Information**

Name	CPNE1 ( <u>HGNC:2314</u> )
Synonyms	CPN1
Function	Calcium-dependent phospholipid-binding protein that plays a role in calcium-mediated intracellular processes (PubMed: <u>14674885</u> ). Involved in the TNF-alpha receptor signaling pathway in a calcium- dependent manner (PubMed: <u>14674885</u> ). Exhibits calcium-dependent phospholipid binding properties (PubMed: <u>19539605</u> , PubMed: <u>9430674</u> ). Plays a role in neuronal progenitor cell differentiation; induces neurite outgrowth via a AKT-dependent signaling cascade and calcium- independent manner (PubMed: <u>23263657</u> , PubMed: <u>25450385</u> ). May recruit target proteins to the cell membrane in a calcium-dependent manner (PubMed: <u>12522145</u> ). May function in membrane trafficking (PubMed: <u>9430674</u> ). 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: <u>18212740</u> ). Also induces endoprotease processing of NF-kappa-B p50/NFKB1, p52/NFKB2, RELB and REL (PubMed: <u>18212740</u> ).
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).

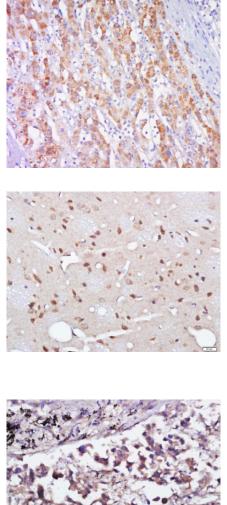
#### Images



Protein: spleen(mouse) lysate at 40ug; Primary: rabbit Anti-CPNE1 (AP55386) 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,

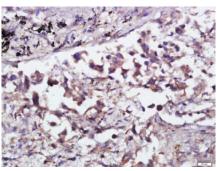
Unconjugated(AP55386) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and



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(AP55386) 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(AP55386) 1:400, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.