

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

Specification

CPNE1 Polyclonal Antibody - Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q99829
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	59 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CPNE1
Epitope Specificity	1-120/537
Isotype	IgG
Purity	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.

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 (HGNC:2314), CPN1

Dilution

WB~~1:1000
IHC-P~~N/A
IHC-F~~N/A
IF~~1:50~200
ICC~~N/A
E~~N/A

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:14674885). Involved in the TNF-alpha receptor signaling pathway in a calcium- dependent manner (PubMed:14674885). Exhibits calcium-dependent phospholipid binding properties (PubMed:19539605, PubMed:9430674). Plays a role in neuronal progenitor cell differentiation; induces neurite outgrowth via a AKT-dependent signaling cascade and calcium- independent manner (PubMed:23263657, PubMed:25450385). May recruit target proteins to the cell membrane in a calcium-dependent manner (PubMed:12522145). May function in membrane trafficking (PubMed:9430674). 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:18212740). Also induces endoprotease processing of NF-kappa-B p50/NFKB1, p52/NFKB2, RELB and REL (PubMed:18212740).

Cellular Location

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

Tissue Location

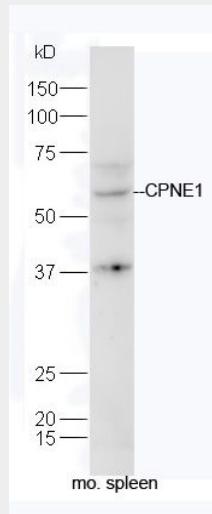
Expressed in neutrophils (at protein level) (PubMed:12949241). Widely expressed. Expressed in the brain. Expressed in neutrophil precursors from bone marrow and peripheral blood (PubMed:12949241).

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

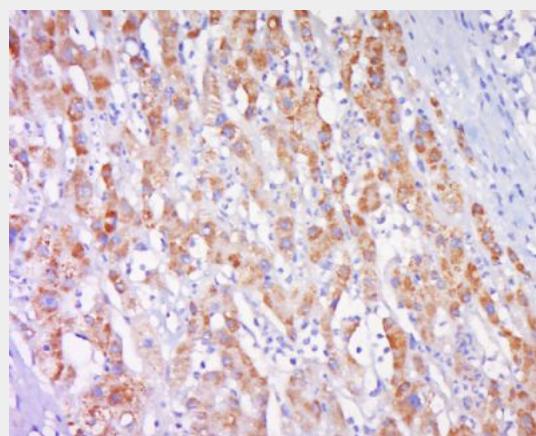
Protein: spleen(mouse) lysate at 40ug;

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

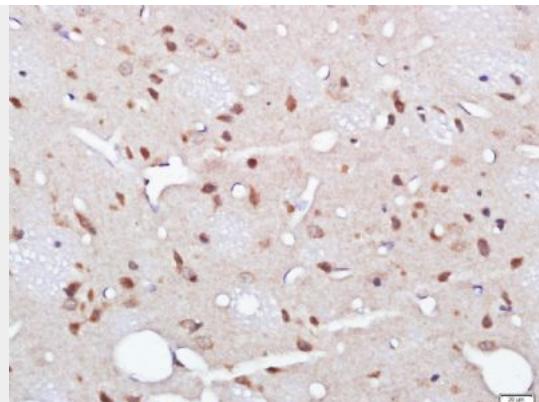
Observed band size: 59 kD



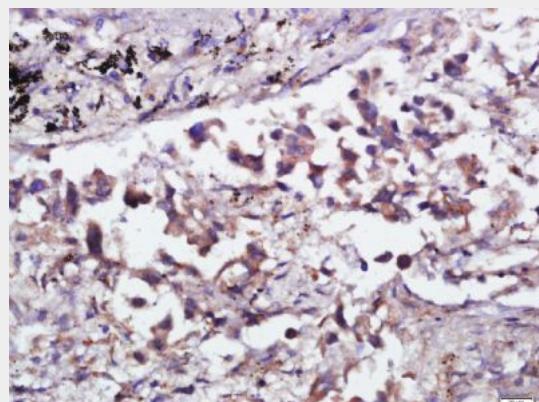
Tissue/cell: human liver carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

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