10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CPNE3 Rabbit pAb

CPNE3 Rabbit pAb
Catalog # AP55388

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	O75131
Predicted	Human, Mouse, Rat, Dog, Horse, Rabbit, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	60131
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CPNE3
Epitope Specificity	201-300/537
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.
Post-translational modifications	Phosphorylated on serine and threonine residues.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Copine 3 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 3 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 3 functions in membrane trafficking and is capable of binding phospholipids in a calcium-dependent manner. Differing from other members of the copine family, copine 3 may possess some intrinsic kinase activity. Copine 3 exists as a monomer in the cytosol and undergoes a conformational change upon binding to calcium.

Additional Information

Gene ID	8895
Other Names	Copine-3, Copine III {ECO:0000303|PubMed:11041869, ECO:0000312|HGNC:HGNC:2316}, CPNE3 (HGNC:2316)
Target/Specificity	Ubiquitous.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000

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.

Protein Information

Name	CPNE3 (HGNC:2316)
Function	Calcium-dependent phospholipid-binding protein that plays a role in ERBB2-mediated tumor cell migration in response to growth factor heregulin stimulation (PubMed:20010870).
Cellular Location	Nucleus. Cytoplasm. Cell membrane Cell junction. Cell junction, focal adhesion. Note=Associates to the membrane in a calcium-dependent manner (PubMed:20010870). Translocates to the cell membrane and the nucleus in a calcium- or growth factor heregulin- dependent manner (PubMed:20010870, PubMed:21087455). Colocalizes with the tyrosine phosphorylated ERBB2 form at cell membrane and focal adhesions in a calcium- or growth factor heregulin-dependent manner (PubMed:20010870).
Tissue Location	Expressed in breast and weakly in prostate and ovarian tissues (PubMed:20010870). Expressed in neutrophils (at protein level) (PubMed:12949241). Widely expressed (PubMed:11041869). Expressed in the brain. Expressed in neutrophil precursors from the bone marrow and peripheral blood (PubMed:12949241). Expressed in primary breast tumors and ovarian endometrioid adenocarcinoma (PubMed:20010870)

Background

Copine 3 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 3 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 3 functions in membrane trafficking and is capable of binding phospholipids in a calcium-dependent manner. Differing from other members of the copine family, copine 3 may possess some intrinsic kinase activity. Copine 3 exists as a monomer in the cytosol and undergoes a conformational change upon binding to calcium.