

CPNE3 Rabbit pAb

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Product Information

Application IHC-P, IHC-F, IF, E

Primary Accession 075131

Reactivity Rat, Mouse, Rabbit, Dog, Horse

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

affinity purified by Protein A **Purity**

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

8895 Gene ID

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=1:500

0-10000

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

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