

Ceramide Transfer Protein (CERTL). Rabbit Antigen Immunoaffinity Purified Polyclonal , Human

Lipid-transfer protein CERT, Goodpasture antigen-binding protein isoform 2, GPBP26, GPBP, Collagen type IV alpha-3-binding protein, StAR-related lipid transfer protein 11, StARD11, START domain-

BACKGROUND

CERT mediates the ATP-dependent ER-to-Golgi transfer of ceramide in a non-vesicular manner. The biosynthesis of lipids involves steps that occur in different intracellular compartments. The movement of lipids within these compartments is important in lipid-mediated signalling. Human CERT is identical to a splice variant of human Goodpasture antigen-binding protein (GPBP26).

CERT contains a phosphoinositide-binding pleckstrin-homology (PH) domain (which targets CERT to the Golgi by binding phosphatidylinositol-4-phosphate (PtdIns4P)), a middle region, and a putative lipid-transfer-catalysing domain called START. CERT and CERTL can specifically extract ceramide from phospholipid bilayers in a START-domain-dependent manner. CERT interacts with ER membranes and specifically extracts ceramide. CERT catalyses both the specific extraction of ceramide from donor vesicles and its transfer to acceptor vesicles. CERT can associate with the Golgi in a PtdIns4P dependent manner.

ORDERING INFORMATION

CATALOG NUMBER
X2379P

SIZE
10 Miniblots

FORM
Affinity Purified

HOST/CLONE
Rabbit

FORMULATION
Provided as solution in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION
Lot specific, see vial

ISOTYPE
IgG

APPLICATIONS
Western Blot

IMMUNOGEN

Synthetic peptide derived from human CERTL protein

SPECIES REACTIVITY

Human

COMMENTS

Antibody can be used for Western blotting (1:400 starting dilution). Optimal concentration should be evaluated by serial dilutions.

STORAGE

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

For research use only. Not for use in human diagnostics or therapeutics.

POSITIVE CONTROL/TISSUE EXPRESSION

Ovary

SHIP CONDITIONS

Ship on gel ice, store at -20°C immediately upon arrival

REFERENCES

1. Hanada K., Kumagai K., Yasuda S., Miura Y., Kawano M., Fukasawa M., Nishijima M.; "Molecular machinery for non-vesicular trafficking of ceramide."; *Nature* 426:803–809(2003).
2. Raya A., Revert F., Navarro S., Saus J.; "Characterization of a novel type of serine/threonine kinase that specifically phosphorylates the human goodpasture antigen."; *J. Biol. Chem.* 274:12642–12649(1999).
3. Raya A., Revert-Ros F., Martinez-Martinez P., Navarro S., Rosello E., Vieites B., Granero F., Forteza J., Saus J.; "Goodpasture antigen-binding protein, the kinase that phosphorylates the Goodpasture antigen, is an alternatively spliced variant implicated in autoimmune pathogenesis."; *J. Biol. Chem.* 275:40392–40399(2000).
4. "The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC)."; *Genome Res.* 14:2121–2127(2004).
5. Ogi T., Yamamoto Y., Ohmori H.; "Homo sapiens genomic sequence, containing DINB1 and GPBP gene."; Submitted (JAN-2000) to the EMBL/GenBank/DDBJ databases.
6. Olsen J.V., Blagoev B., Gnäd F., Macek B., Kumar C., Mortensen P., Mann M.; "Global, in vivo, and site-specific phosphorylation dynamics in signaling networks."; *Cell* 127:635–648(2006).

LAST MODIFIED 3/11/2008

For research use only. Not for use in human diagnostics or therapeutics.