CKAP4 (cytoskeleton-associated protein 4), also known as p63, CLIMP-63 or ERGIC-63, is a 602 amino acid single-pass type II transmembrane protein that links the endoplasmic reticulum (ER) to the cytoskeleton. Considered a novel protein in maintaining ER morphology, CKAP4 anchors the ER to microtubules which is required for maintaining ER spatial distribution during inter-phase of the cell cycle. CKAP4 can be reversibly palmitoylated and phosphorylated and is a major substrate of the palmitoyl acyltransferase, ZDHHC2. It is suggested that CKAP4 binds with high affinity to an inhibitor of cell proliferation, antiproliferative factor (APF), and blocks its activity on bladder epithelial cells. Two isoforms of CKAP4 exist due to alternative splicing.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: CKAP4 (human) mapping to 12q23.3; CKAP4 (mouse) mapping to 10 C1.

SOURCE
CKAP4 (A-3) is a mouse monoclonal antibody raised against amino acids 513-602 mapping at the C-terminus of CKAP4 of human origin.

PRODUCT
Each vial contains 200 μg IgG; kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS
CKAP4 (A-3) is recommended for detection of CKAP4 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CKAP4 siRNA (h): sc-95758, CKAP4 siRNA (m): sc-142354, CKAP4 shRNA Plasmid (h): sc-95758-SH, CKAP4 shRNA Plasmid (m): sc-142354-SH, CKAP4 shRNA (h) Lentiviral Particles: sc-95758-V and CKAP4 shRNA (m) Lentiviral Particles: sc-142354-V.

Molecular Weight of CKAP4: 63 kDa.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG HRP: sc-516102 with DAB, 50X: sc-24982 κBP-HRP: sc-516102κBP-FITC: sc-516140 or m-IgG κBP-PE: sc-516214 κ
2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).
3) Immunofluorescence: use m-IgG HRP: sc-516140 or m-IgG HRP: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.
4) Immunohistochemistry: use m-IgG HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA

STORE
Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.