Mouse Anti-CKAP4/CLIMP-63 [MD352]: MC0237, MC0237RTU7

Intended Use: For Research Use Only

Description: CKAP4 (cytoskeleton-associated protein 4), also known as CLIMP-63, p63 or ERGIC-63, is a 602 amino acid single-pass type II transmembrane protein that links the rough endoplasmic reticulum to the cytoskeleton. Considered a novel protein in maintaining endoplasmic reticulum morphology, CKAP4 anchors the endoplasmic reticulum to microtubles which is required for maintaining ER spatial distribution during interphase 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.

Specifications

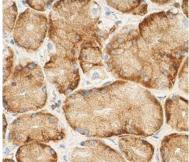
| Description | | Catalog No. | Size |
|----------------|---|-------------|------|
| Package: | | | |
| Applications: | IHC, ELISA, IF, IP, WB | | |
| Storage: | Store at 2°- 8°C | | |
| Formulation: | Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN3) | | |
| Localization: | Cytoplasm | | |
| Immunogen: | Peptide aa 513-602 C-terminus human CKAP4 protein | | |
| Reactivity: | Human, mouse, rat | | |
| Isotype: | IgG1k | | |
| Source: | Mouse | | |
| Clone: | MD352 | | |
| specifications | | | |

| Description | Catalog No. | Size |
|-------------------------------------|-------------|------|
| CKAP4/CLIMP-63 [MD352] Concentrated | MC0237 | 1 ml |
| CKAP4/CLIMP-63 [MD352] Prediluted | MC0237RTU7 | 7 ml |

IHC Procedure*

| Positive Control Tissue: | Breast, kidney, osteosarcoma, Ewing sarcoma | | |
|---|---|--|--|
| Concentrated Dilution: | 25-200 | | |
| Pretreatment: | Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C | | |
| Incubation Time and Temp: | 30-60 minutes @ RT | | |
| Detection: | Refer to the detection system manual | | |
| * Result should be confirmed by an established diagnostic procedure | | | |

Result should be confirmed by an established diagnostic procedure.



FFPE human lower stomach stained with anti-CKAP4 using DAB

References:

- 1. Palmitoylation of cytoskeleton associated protein 4 by DHHC2 regulates antiproliferative factor-mediated signaling. Planey, SL., et al. Mol Biol Cell. 20: 1454-63, 2009.
- 2. A new, unexpected action of olomoucine, a CDK inhibitor, on normal human cells: up-regulation of CLIMP-63, a cytoskeleton-linking membrane protein. Wesierska-Gadek, J., et al. J Cell Biochem. 102: 1405-19, 2007.
- 3. CKAP4/p63 is a receptor for the frizzled-8 protein-related antiproliferative factor from interstitial cystitis patients. Conrads, TP., et al. J Biol Chem. 281: 37836-43, 2006.

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