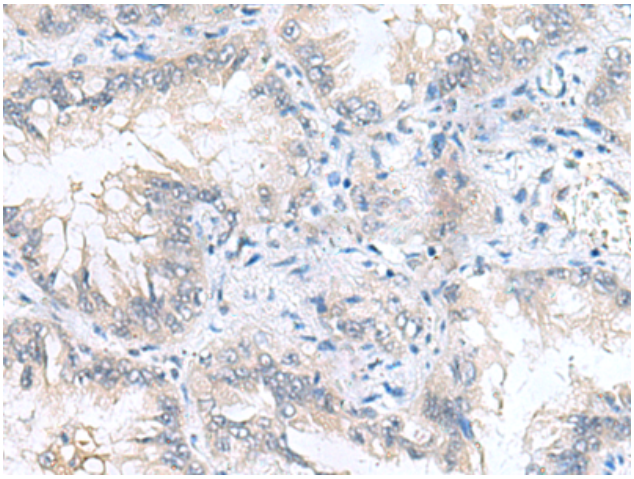
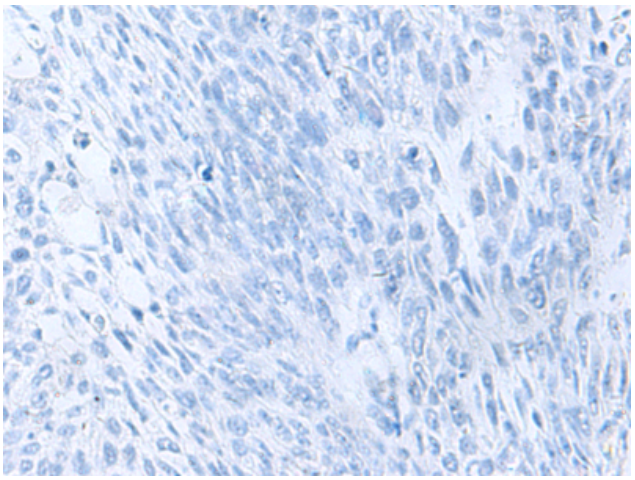
CAMSAP3 RABBIT PAB

Cat.#: S222303
Product Name: Anti-CAMSAP3 Rabbit Polyclonal Antibody
Synonyms: NEZHA; PPP1R80; KIAA1543
UNIPROT ID: Q9P1Y5 (Gene Accession - NP_065953)
Background: Key microtubule-organizing protein that specifically binds the minus-end of non-centrosomal microtubules and regulates their dynamics and organization (PubMed:19041755, PubMed:23169647). Specifically recognizes growing microtubule minus-ends and autonomously decorates and stabilizes microtubule lattice formed by microtubule minus-end polymerization (PubMed:24486153). Acts on free microtubule minus-ends that are not capped by microtubule-nucleating proteins or other factors and protects microtubule minus-ends from depolymerization (PubMed:24486153). In addition, it also reduces the velocity of microtubule polymerization (PubMed:24486153). Required for the biogenesis and the maintenance of zonula adherens by anchoring the minus-end of microtubules to zonula adherens and by recruiting the kinesin KIFC3 to those junctional sites (PubMed:19041755). Required for orienting the apical-to-basal polarity of microtubules in epithelial cells: acts by tethering non-centrosomal microtubules to the apical corte,x leading to their longitudinal orientation (PubMed:27802168, PubMed:26715742). Plays a key role in early embryos, which lack centrosomes: accumulates at the microtubule bridges that connect pairs of cells and enables the formation of a non-centrosomal microtubule-organizing center that directs intracellular transport in the early embryo (By similarity). Couples non-centrosomal microtubules with actin: interaction with MACF1 at the minus ends of non-centrosomal microtubules, tethers the microtubules to actin filaments, regulating focal adhesion size and cell migration (PubMed:27693509). Plays a key role in the generation of non-centrosomal microtubules by accumulating in the pericentrosomal region and cooperating with KATNA1 to release non-centrosomal microtubules from the centrosome (PubMed:28386021). Through the microtubule cytoskeleton, also regulates the organization of cellular organelles including the Golgi and the early endosomes (PubMed:28089391). Through interaction with AKAP9, involved in translocation of Golgi vesicles in epithelial cells, where microtubules are mainly non-centrosomal (PubMed:28089391).
Immunogen: Synthetic peptide of human CAMSAP3
Applications: ELISA, IHC
Recommended Dilutions: IHC: 50-200; ELISA: 5000-10000
Host Species: Rabbit
Clonality: Rabbit Polyclonal
Isotype: Immunogen-specific rabbit IgG
Purification: Antigen affinity purification
Species Reactivity: Human, Mouse
Constituents: PBS (without Mg2+ and Ca2+), pH 7.4, 150 mM NaCl, 0.05% Sodium Azide and 40% glycerol
Research Areas: Signal Transduction
Storage & Shipping: Store at -20°C. Avoid repeated freezing and thawing



Immunohistochemistry analysis of paraffin embedded Human lung cancer tissue using 222303(CAMSAP3 Antibody) at a dilution of 1/90(Cytoplasm).



In comparision with the IHC on the left, the same paraffin-embedded Human lung cancer tissue is first treated with the synthetic peptide and then with 222303(Anti-CAMSAP3 Antibody) at dilution 1/90.