



CEP55 (phospho Ser425) rabbit pAb

Cat No.:ES6712

For research use only

Overview

Product Name	CEP55 (phospho Ser425) rabbit pAb
Host species	Rabbit
Applications	IHC;IF;WB;ELISA
Species Cross-Reactivity	Human;Rat;Mouse;
Recommended dilutions	WB 1:500-2000 Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.
Immunogen	Synthesized phospho-peptide around the phosphorylation site of human CEP55 (phospho Ser425)
Specificity	Phospho-CEP55 (S425) Polyclonal Antibody detects endogenous levels of CEP55 protein only when phosphorylated at S425.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	Centrosomal protein of 55 kDa
Gene Name	CEP55
Cellular localization	Cytoplasm . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Cleavage furrow . Midbody, Midbody ring . Present at the centrosomes at interphase. A small po
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	
Human Gene ID	55165
Human Swiss-Prot Number	Q53EZ4
Alternative Names	CEP55; C10orf3; URCC6; Centrosomal protein of 55





Background

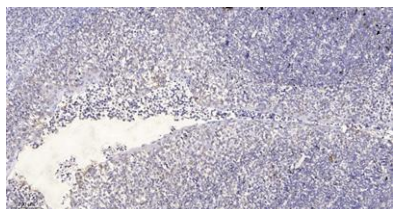
kDa; Cep55; Up-regulated in colon cancer 6
function: Plays a role in mitotic exit and cytokinesis. Not required for microtubule nucleation. Recruits PDCD6IP and TSG101 to midbody during cytokinesis.,PTM: There is a hierarchy of phosphorylation, where both Ser-425 and Ser-428 are phosphorylated at the onset of mitosis, prior to Ser-436. Phosphorylation at Ser-425 and Ser-428 is required for dissociation from the centrosome at the G2/M boundary. Phosphorylation at the 3 sites, Ser-425, Ser-428 and Ser-436, is required for protein function at the final stages of cell division to complete cytokinesis successfully.,subcellular location: Present at the centrosomes at interphase. A small portion is associated preferentially with the mother centriole, whereas the majority localizes to the pericentriolar material. During mitosis, loss of affinity for the centrosome at the onset of prophase and diffusion throughout the cell. This dissociation from the centrosome is phosphorylation-dependent. May remain localized at the centrosome during mitosis in certain cell types. Appears at the cleavage furrow in late anaphase and in the midbody in cytokinesis.,subunit: Homodimer. Interacts (phosphorylated on Ser-425 and Ser-428) with PLK1. Interacts with AKAP9; the interaction occurs in interphase and is lost upon mitotic entry. Interacts with PCNT; the interaction occurs in interphase and is lost upon mitotic entry. Interacts with PDCD6IP; the interaction is direct; CEP55 binds PDCD6IP in a 2:1 stoichiometry; PDCD6IP competes with TSG101 for the same binding site. Interacts with TSG101; TSG101 competes with PDCD6IP for the same binding site; interaction is required for cytokinesis but not for viral budding. Interacts with FAM125A, VPS37B, VPS37C and VPS28.,tissue specificity: Widely expressed, mostly in proliferative tissues. Highly expressed in testis. Intermediate levels in adult and fetal thymus, as well as in various cancer cell lines. Low levels in different parts of the digestive tract, bone marrow, lymph nodes,





placenta, fetal heart and fetal spleen. Hardly detected in brain.,

Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Western Blot analysis of 1 HEK-293 cell, 2, LPS 100ng/mL 30min treated ,using primary antibody at 1:1000 dilution. Secondary antibody(catalog#:RS23920) was diluted at 1:10000

