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Anti-RCC2 Antibody

Catalog # AP51470

Product Information

Application	WB, IHC
Primary Accession	Q9P258
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56085

Additional Information

Gene ID	55920
Other Names	KIAA1470; TD60; Protein RCC2; RCC1-like protein TD-60; Telophase disk protein of 60 kDa
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human RCC2. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	RCC2
Synonyms	KIAA1470, TD60
Function	Multifunctional protein that may affect its functions by regulating the activity of small GTPases, such as RAC1 and RALA (PubMed:12919680, PubMed:25074804, PubMed:26158537, PubMed:28869598). Required for normal progress through the cell cycle, both during interphase and during mitosis (PubMed:12919680, PubMed:23388455, PubMed:26158537). Required for the presence of normal levels of MAD2L1, AURKB and BIRC5 on inner centromeres during mitosis, and for normal attachment of kinetochores to mitotic spindles (PubMed:12919680, PubMed:26158537). Required for normal organization of the microtubule cytoskeleton in interphase cells (PubMed:23388455). Functions as guanine nucleotide exchange factor (GEF) for RALA (PubMed:26158537). Interferes with the activation of RAC1 by guanine nucleotide exchange factors (PubMed:25074804). Prevents accumulation of active, GTP-bound RAC1, and suppresses RAC1-mediated

reorganization of the actin cytoskeleton and formation of membrane protrusions (PubMed:25074804, PubMed:28869598). Required for normal cellular responses to contacts with the extracellular matrix of adjacent cells, and for directional cell migration in response to a fibronectin gradient (in vitro) (PubMed:25074804, PubMed:28869598).

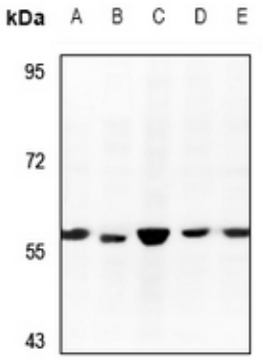
Cellular Location

Nucleus, nucleolus. Nucleus. Cytoplasm, cytoskeleton. Chromosome, centromere. Cytoplasm, cytoskeleton, spindle. Chromosome. Midbody. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Note=Appears in the nucleus at G2, then concentrates at the inner centromere region of chromosomes during prophase. Redistributes to the midzone of the mitotic spindle during anaphase. Here, the protein covers the entire equatorial diameter from cortex to cortex (PubMed:12919680, PubMed:1939370, PubMed:7559776, PubMed:9914378). Colocalizes with cytoplasmic microtubules in interphase cells (PubMed:23388455). Colocalizes with RAC1 at the cell membrane (PubMed:25074804).

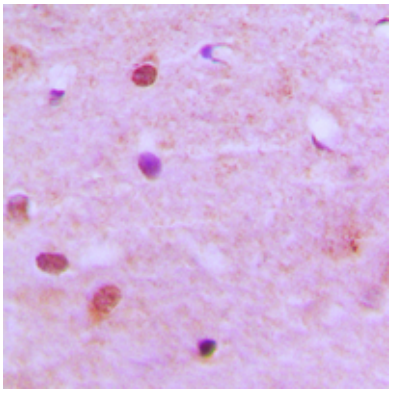
References

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Nagase T.,et al.DNA Res. 7:143-150(2000).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Andreassen P.R.,et al.J. Cell Sci. 99:523-534(1991).
Martineau S.N.,et al.J. Cell Biol. 131:191-205(1995).

Images



Western blot analysis of RCC2 expression in C6 (A), CT26 (B), HEK293T (C), HCT116 (D), HepG2 (E) whole cell lysates. (Predicted band size: 56 kD; Observed band size: 56 kD)



Immunohistochemical analysis of RCC2 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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