



Rabbit Anti-Phospho-RCC1 (Ser11) antibody

SL3360R

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| Product Name: | Phospho-RCC1 (Ser11) |
| Chinese Name: | 磷酸化染色体浓缩调控蛋白1抗体 |
| Alias: | Cell cycle regulatory protein; CHC 1; CHC1; Chromosome condensation 1; Chromosome condensation protein 1; Guanine nucleotide releasing protein; HERC2; Ran GEF; RanGEF; RCC 1; RCC1 I; Regulator of chromosome condensation 1; Regulator of chromosome condensation; SHEP1; RCC1_HUMAN. |
| Organism Species: | Rabbit |
| Clonality: | Polyclonal |
| React Species: | Human,Mouse,Rat,Dog,Pig,Cow,Horse,Sheep, |
| Applications: | ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user. |
| Molecular weight: | 45kDa |
| Cellular localization: | The nucleuscytoplasmic |
| Form: | Lyophilized or Liquid |
| Concentration: | 1mg/ml |
| immunogen: | KLH conjugated Synthesised phosphopeptide derived from human RCC1 around the phosphorylation site of Ser11:RR(p-S)PP |
| Isotype: | IgG |
| Purification: | affinity purified by Protein A |
| Storage Buffer: | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| Storage: | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |
| PubMed: | PubMed |
| Product Detail: | Ran GTPase plays important roles in nucleocytoplasmic transport in interphase and in |

both spindle formation and nuclear envelope (NE) assembly during mitosis. The latter functions rely on the presence of high local concentrations of GTP bound Ran near mitotic chromatin. RanGTP localization has been proposed to result from the association of Ran's GDP/GTP exchange factor, RCC1, with chromatin, but Ran is shown here to bind directly to chromatin in two modes, either dependent or independent of RCC1, and, when bound, to increase the affinity of chromatin for NE membranes.

Function:

Guanine-nucleotide releasing factor that promotes the exchange of Ran-bound GDP by GTP. Involved in the regulation of onset of chromosome condensation in the S phase. Binds both to the nucleosomes and double-stranded DNA. RCC1-Ran complex (together with other proteins) acts as a component of a signal transmission pathway that detects unreplicated DNA. Plays a key role in nucleo-cytoplasmic transport, mitosis and nuclear-envelope assembly.

Subunit:

Interacts with ARRB2; the interaction is detected in the nucleus upon OR1D2 stimulation.

Subcellular Location:

Nucleus. Cytoplasm. Note=Becomes dispersed throughout the cytoplasm during mitosis.

Post-translational modifications:

N-terminal methylation by METTL11A/NTM1 is required for binding double-stranded DNA and stable chromatin association. Di- and trimethylation produce a permanent positive charge on the amino group, which facilitate electrostatic binding to the phosphate groups on DNA, while inhibiting histone-binding. Methylated tail helps retain RCC1 on chromosomes during nucleotide exchange on Ran.

Similarity:

Contains 7 RCC1 repeats.

SWISS:

P18754

Gene ID:

1104

Database links:

[Entrez Gene: 1104](#)Human

[Entrez Gene: 100088](#)Mouse

[Entrez Gene: 682908](#)Rat

[Omid: 179710](#)Human

[SwissProt: P18754](#)Human

[SwissProt: Q8VE37](#)Mouse

[Unigene: 469723](#)Human

[Unigene: 255045](#)Mouse

[Unigene: 217123](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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