

## RCC1 (RanGEF)

human, recombinant, *E. coli*

Cat. No.	Amount
PR-306	50 µg

For *in vitro* use only  
Quality guaranteed for 12 months  
Store at -80°C

### Avoid freeze / thaw cycles

### Form

Liquid. Supplied as a 1 mg/ml solution in 20 mM HEPES, pH 7.6, 50 mM NaCl and 2 mM DTE.

### Molecular weight

44.97 kDa (421 amino acids).

### Purity

≥95% by SDS-PAGE.

### Description

RCC1 (Regulator of Chromosome Condensation, a  $\beta$  propeller chromatin-bound protein) catalyzes guanine nucleotide exchange of the Ras-related nuclear protein Ran. RCC1 is the guanine nucleotide exchange factor (GEF) for Ran which induces exchange between the bound GDP and cellular GTP. Genetic studies have suggested that RCC1 may be involved in sensing the replication state of DNA and controlling the activation of Cdc2/cyclin B protein kinase through Ran.

### Selected References:

- Renault *et al.* (2001) Structural Basis for Guanine Nucleotide Exchange on Ran by the regulator of Chromosome Condensation (RCC1). *Cell* **105**:245.  
Clarke *et al.* (1995) Regulation of Cdc2/cyclin B activation by Ran, a Ras-related GTPase. *J. Cell Sci.* **108**:1217.  
Bischoff FR and Ponstingl H (1991) Catalysis of guanine nucleotide exchange on Ran by the mitotic regulator RCC1. *Nature* **354**:80.

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