

**RCC1 (RanGEF)**

Regulator of Chromosome Condensation, Ran Guanine Exchange Factor
human, recombinant, *E. coli*

Cat. No.	Amount
PR-306	50 µg

For general laboratory use.

Shipping: shipped on dry ice

Storage Conditions: store at -80 °C

Additional Storage Conditions: avoid freeze/thaw cycles

Shelf Life: 12 months

Molecular Weight: 44.97 kDa (421 amino acids)

Accession number: BC010067

Purity: > 90 % (SDS-PAGE)

Form: liquid (Supplied in 20 mM HEPES pH 7.6, 50 mM NaCl and 2 mM DTE)

Description:

RCC1 (Regulator of Chromosome Condensation, a β 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 and Ponstingl (1991) Catalysis of guanine nucleotide exchange on Ran by the mitotic regulator RCC1. *Nature* **354**:80.