

Anti-RCC1 Antibody Picoband™ (monoclonal, 7B5D2)
Catalog # ABO16573**Specification****Anti-RCC1 Antibody Picoband™ (monoclonal, 7B5D2) - Product Information**

Application	WB
Primary Accession	P18754
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human
Clonality	Monoclonal
Format	Lyophilized

Description

Anti-RCC1 Antibody Picoband™ (monoclonal, 7B5D2) . Tested in WB applications. This antibody reacts with Human.

Reconstitution

Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.

Anti-RCC1 Antibody Picoband™ (monoclonal, 7B5D2) - Additional Information

Gene ID 1104

Other Names

Regulator of chromosome condensation, Cell cycle regulatory protein, Chromosome condensation protein 1, RCC1, CHC1

Calculated MW

47 kDa KDa

Application Details

Western blot, 0.25-0.5 µg/ml, Human

Contents

Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na₂HPO₄.

Immunogen

E.coli-derived human RCC1 recombinant protein (Position: A14-S421).

Purification

Immunogen affinity purified.

Storage

At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.

Anti-RCC1 Antibody Picoband™ (monoclonal, 7B5D2) - Protein Information

Name RCC1**Synonyms** CHC1**Function**

Guanine-nucleotide releasing factor that promotes the exchange of Ran-bound GDP by GTP, and thereby plays an important role in RAN-mediated functions in nuclear import and mitosis (PubMed:11336674, PubMed:17435751, PubMed:1944575, PubMed:20668449, PubMed:22215983, PubMed:29042532). Contributes to the generation of high levels of chromosome-associated, GTP-bound RAN, which is important for mitotic spindle assembly and normal progress through mitosis (PubMed:12194828, PubMed:17435751, PubMed:22215983). Via its role in maintaining high levels of GTP-bound RAN in the nucleus, contributes to the release of cargo proteins from importins after nuclear import (PubMed:22215983). Involved in the regulation of onset of chromosome condensation in the S phase (PubMed:3678831). Binds both to the nucleosomes and double-stranded DNA (PubMed:17435751, PubMed:18762580).

Cellular Location

Nucleus. Chromosome. Cytoplasm Note=Predominantly nuclear in interphase cells (PubMed:12194828). Binds to mitotic chromosomes (PubMed:12194828, PubMed:17435751, PubMed:20668449).

Anti-RCC1 Antibody Picoband™ (monoclonal, 7B5D2) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-RCC1 Antibody Picoband™ (monoclonal, 7B5D2) - Images

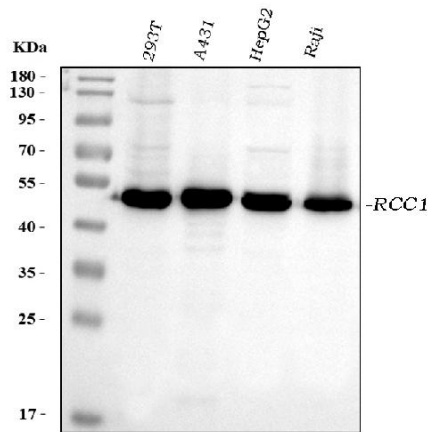


Figure 1. Western blot analysis of RCC1 using anti-RCC1 antibody (M02719-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human 293T whole cell lysates,
Lane 2: human A431 whole cell lysates,
Lane 3: human HepG2 whole cell lysates,
Lane 4: human Raji whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-RCC1 antigen affinity purified monoclonal antibody (Catalog # M02719-1) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for RCC1 at approximately 47 kDa. The expected band size for RCC1 is at 47 kDa.

Anti-RCC1 Antibody Picoband™ (monoclonal, 7B5D2) - Background

CHC1, also named as RCC1, SNHG3-RCC1, promotes the exchange of ran-bound gdp by gtp. It is involved in the regulation of onset of chromosome condensation in the S-phase. Phosphorylation of RCC1 on serines located in or near its nuclear localization signal activates RCC1 to generate RanGTP on mitotic chromosomes, which is required for spindle assembly and chromosome segregation. This antibody is a rabbit polyclonal antibody raised against residues near the C terminus of human RCC1. The geneID has updated as 1104 recently.