

## DATASHEET

# RB1 Mouse Monoclonal Antibody(C2938)

CAT. NO. AMA02550

### KEY FEATURES

Target	RB1	Source / Host	Mouse
Reactivity	Human	Clonality	Monoclonal
Applications	WB, IF/ICC, FC	Conjugation	Unconjugated
Form / Buffer	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

### BACKGROUND

Tumor suppressor that is a key regulator of the G1/S transition of the cell cycle . The hypophosphorylated form binds transcription regulators of the E2F family, preventing transcription of E2F-responsive genes . Both physically blocks E2Fs transactivating domain and recruits chromatin-modifying enzymes that actively repress transcription . Cyclin and CDK-dependent phosphorylation of RB1 induces its dissociation from E2Fs, thereby activating transcription of E2F responsive genes and triggering entry into S phase . RB1 also promotes the G0-G1 transition upon phosphorylation and activation by CDK3/cyclin-C . Directly involved in heterochromatin formation by maintaining overall chromatin structure and, in particular, that of constitutive heterochromatin by stabilizing histone methylation.

### APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IF/ICC	1:100 - 1:500
FC	1:100 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

### PRODUCT OVERVIEW

Description	Mouse monoclonal to RB1
Specificity	Recognizes endogenous levels of RB1 protein
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human RB1 expressed in E. Coli
Purification	This antibody is purified through a protein G column.
Molecular Weight	Predicted: 106 kD; Observed: 110 kD
Form/Buffer	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	Retinoblastoma-associated protein; p105-Rb; pRb; Rb; pp110
Gene Symbol	RB1
Entrez Gene	5925(Human)
SwissProt	P06400(Human)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

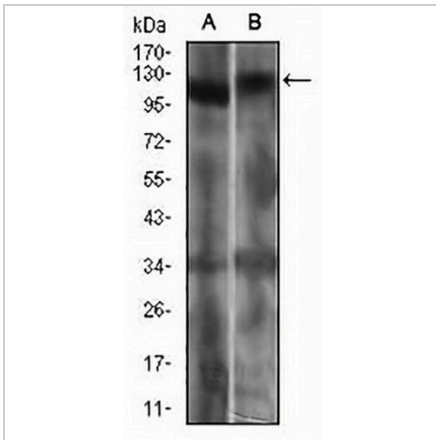
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

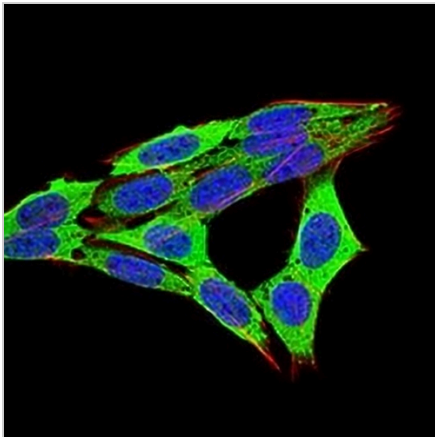
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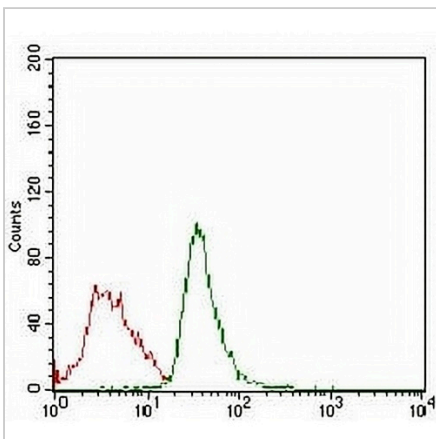
**DATA**



Western blot analysis of RB1 expression in Jurkat (A), A431 (B) whole cell lysates. (Predicted band size: 106 kD; Observed band size: 110 kD kD)



Immunofluorescent analysis of RB1 staining in NIH3T3 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



Flow cytometric analysis of Jurkat cells using Anti-RB1 Antibody (green) and negative control (red).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.