

RBL2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12224a

Specification

RBL2 Antibody (N-term) - Product Information

Application FC, WB,E Primary Accession Q08999

Other Accession <u>055081</u>, <u>064700</u>, <u>NP_005602.3</u>

Reactivity
Predicted
Host
Clonality
Isotype
Antigen Region

Human
Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
Antigen Region

165-194

RBL2 Antibody (N-term) - Additional Information

Gene ID 5934

Other Names

Retinoblastoma-like protein 2, 130 kDa retinoblastoma-associated protein, p130, Retinoblastoma-related protein 2, RBR-2, pRb2, RBL2, RB2

Target/Specificity

This RBL2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 165-194 amino acids from the N-terminal region of human RBL2.

Dilution

FC~~1:25

WB~~1:2000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

RBL2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

RBL2 Antibody (N-term) - Protein Information

Name RBL2





Synonyms RB2

Function Key regulator of entry into cell division. Directly involved in heterochromatin formation by maintaining overall chromatin structure and, in particular, that of constitutive heterochromatin by stabilizing histone methylation. Recruits and targets histone methyltransferases KMT5B and KMT5C, leading to epigenetic transcriptional repression. Controls histone H4 'Lys-20' trimethylation. Probably acts as a transcription repressor by recruiting chromatin-modifying enzymes to promoters. Potent inhibitor of E2F-mediated trans-activation, associates preferentially with E2F5. Binds to cyclins A and E. Binds to and may be involved in the transforming capacity of the adenovirus E1A protein. May act as a tumor suppressor.

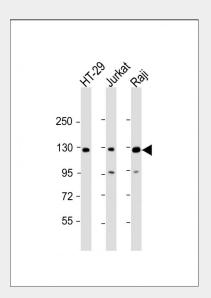
Cellular Location Nucleus.

RBL2 Antibody (N-term) - Protocols

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

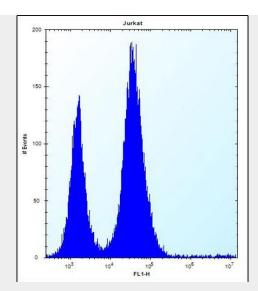
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

RBL2 Antibody (N-term) - Images

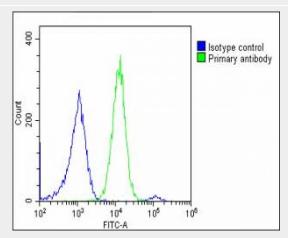


All lanes: Anti-RBL2 Antibody (N-term) at 1:2000 dilution Lane 1: HT-29 whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: Raji whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 128 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





RBL2 Antibody (N-term) (Cat. #AP12224a) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.



Overlay histogram showing U-2 OS cells stained with AP12224a(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP12224a, 1:25 dilution) for 60 min at 37°C. The secondary was Goat-Anti-Rabbit antibody used IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OE188374) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit $IgG1 (1\mu g/1 \times 10^6 cells)$ used under the same conditions. Acquisition of >10, 000 events was performed.

RBL2 Antibody (N-term) - Background

RBL2 is a key regulator of entry into cell division. Directly involved in heterochromatin formation by maintaining overall chromatin structure and, in particular, that of constitutive heterochromatin by stabilizing histone methylation. Recruits and targets histone methyltransferases SUV420H1 and SUV420H2, leading to epigenetic transcriptional repression. Controls histone H4 'Lys-20' trimethylation. Probably acts as a transcription repressor by recruiting chromatin-modifying enzymes to promoters. Potent inhibitor of E2F-mediated trans-activation, associates preferentially with E2F5. Binds to cyclins A and E. Binds to and may be involved in the transforming capacity of the adenovirus E1A protein. RBL2 may act as a tumor suppressor.

RBL2 Antibody (N-term) - References





Schaffer, B.E., et al. Cancer Res. 70(10):3877-3883(2010) Barrow-Laing, L., et al. Virology 400(2):233-239(2010) Lu, F., et al. J. Virol. 84(6):2697-2706(2010) Jowett, J.B., et al. Diabetes 59(3):726-732(2010) Cunningham, J.M., et al. Br. J. Cancer 101(8):1461-1468(2009)

RBL2 Antibody (N-term) - Citations

• Sj7170, a unique dual-function peptide with a specific α-chymotrypsin inhibitory activity and a potent tumor-activating effect from scorpion venom.