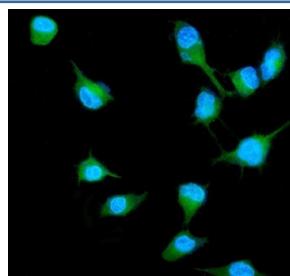


## RALB Antibody (R31944)

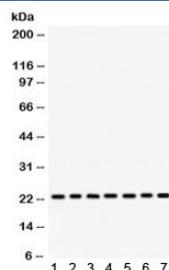
Catalog No.	Formulation	Size
R31944	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

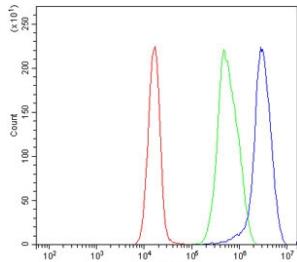
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Format</b>	Antigen affinity purified
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity
<b>Buffer</b>	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
<b>UniProt</b>	P11234
<b>Applications</b>	Western Blot : 0.1-0.5ug/ml Immunofluorescence : 2-4ug/ml Flow Cytometry : 1-3ug/million cells
<b>Limitations</b>	This RALB antibody is available for research use only.



Immunofluorescent staining of FFPE human A549 cells with RALB antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of 1) rat brain, 2) rat thymus, 3) rat lung, 4) mouse spleen, 5) mouse liver, 6) human HeLa, 7) human 22RV1 lysate with RALB antibody. Expected molecular weight ~23 kDa.



Flow cytometry testing of human Jurkat cells with RALB antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= RALB antibody.

## Description

Ras-related protein Ral-B (RalB) is a protein that in humans is encoded by the RALB gene on chromosome 2. This protein is one of two isoforms of the Ral protein, the other being RalA, and part of the Ras GTPase family. As a Ras GTPase, RalB functions as a molecular switch that becomes active when bound to GTP and inactive when bound to GDP. RalB can be activated by RalGEFs and, in turn, activate effectors in signal transduction pathways leading to biological outcomes. Additionally, Ral proteins have been associated with the progression of several cancers, including bladder cancer and prostate cancer. While the above functions appear to be shared between the two Ral isoforms, their differential subcellular localizations result in their differing involvement in certain biological processes. In particular, RalB is more involved in apoptosis and cell motility. Moreover, RalB specifically interacts with Exo84 to assemble the beclin-1- $\zeta$ VPS34 autophagy initiation complex, and with Sec5 to activate the innate immune response via the Tank-binding kinase 1 (TBK1).

## Application Notes

Optimal dilution of the RALB antibody should be determined by the researcher.

## Immunogen

Amino acids DVFFDLMREIRTKMSENKDKNGKKSSKNKSFKERC of human RALB were used as the immunogen for the RALB antibody.

## Storage

After reconstitution, the RALB antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.