

## Basic Information

<b>Product Name</b>	Anti-p70 S6K/RPS6KB1 Antibody
<b>Gene Name</b>	RPS6KB1
<b>Source</b>	Rabbit
<b>Isotype</b>	IgG
<b>Species Reactivity</b>	human, mouse
<b>Tested Application</b>	WB, FCM
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg BSA and 50% glycerol.
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence of human S6K1/RPS6KB1 (IDKILKCKLNLPPYLTQEARDL).
<b>concentration</b>	500 ug/ml
<b>Purification</b>	Immunogen affinity purified.
<b>Observed MW</b>	59KD
<b>Dilution Ratios</b>	Western blot(WB): 1:500-2000 Flow cytometry (FCM):1-3μg/1x10 <sup>6</sup> cells

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## Background Information

Ribosomal protein S6 kinase beta-1 (S6K1), also known as p70S6 kinase (p70S6K, p70-S6K), is an enzyme (specifically, a protein kinase) that in humans is encoded by the RPS6KB1 gene. This gene encodes a member of the ribosomal S6 kinase family of serine/threonine kinases. The encoded protein responds to mTOR (mammalian target of rapamycin) signaling to promote protein synthesis, cell growth, and cell proliferation. Activity of this gene has been associated with human cancer. Alternatively spliced transcript variants have been observed. The use of alternative translation start sites results in isoforms with longer or shorter N-termini which may differ in their subcellular localizations. There are two pseudogenes for this gene on chromosome 17.

## Selected Validation Data

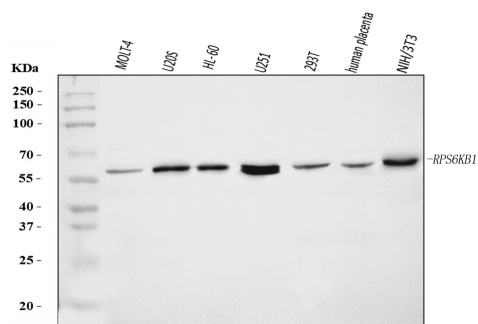


Figure 1. Western blot analysis of anti- S6K1/RPS6KB1 Antibody (A01475-2). The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: MOLT-4 whole cell lysates,

Lane 2: U2OS whole cell lysates,

Lane 3: HL-60 whole cell lysates,

Lane 4: U251 whole cell lysates,

Lane 5: 293T whole cell lysates,

Lane 6: human placenta tissue lysates,

Lane 7: NIH/3T3 whole cell lysates.

Use rabbit anti- RPS6KB1 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for RPS6KB1 at approximately 59KD. The expected band size for RPS6KB1 is at 59KD.

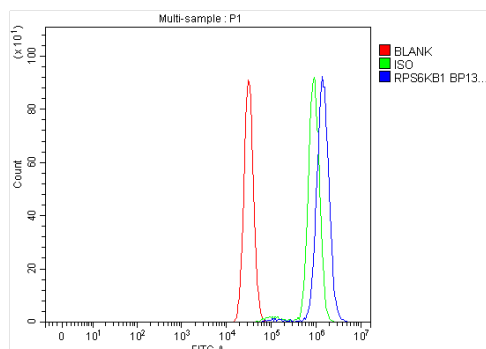


Figure 2. Flow cytometry analysis of MCF-7 cell (1x10<sup>6</sup>) DyLight 488 conjugated goat anti- rabbit IgG(blue) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG DyLight 488. Unlabelled sample (Red line).