

AKT1 Recombinant Antibody



RACO0396

Product Information

Size:

50ul

Reactivity:

Human, Mouse, Rat

Source:

Homo sapiens (Human)

Isotype:

Rabbit IgG

Applications:

ELISA, WB, IHC, IF

Recommended dilutions:

WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200

Protein Background:

AKT1 is one of 3 closely related serine/threonine-protein kinases (AKT1, AKT2 and AKT3) called the AKT kinase, and which regulate many processes including metabolism, proliferation, cell survival, growth and angiogenesis. This is mediated through serine and/or threonine phosphorylation of a range of downstream substrates. Over 100 substrate candidates have been reported so far, but for most of them, no isoform specificity has been reported. AKT is responsible of the regulation of glucose uptake by mediating insulin-induced translocation of the SLC2A4/GLUT4 glucose transporter to the cell surface. Phosphorylation of PTPN1 at 'Ser-50' negatively modulates its phosphatase activity preventing dephosphorylation of the insulin receptor and the attenuation of insulin signaling.

Gene ID:

AKT1

Uniprot

P31749

Synonyms:

RAC-alpha serine/threonine-protein kinase (EC 2.7.11.1) (Protein kinase B) (PKB) (Protein kinase B alpha) (PKB alpha) (Proto-oncogene c-Akt) (RAC-PK-alpha), AKT1, PKB RAC

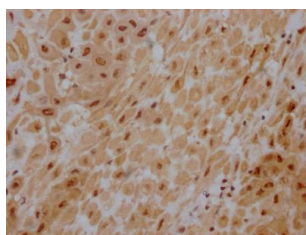
Immunogen:

A synthesized peptide derived from human AKT1.

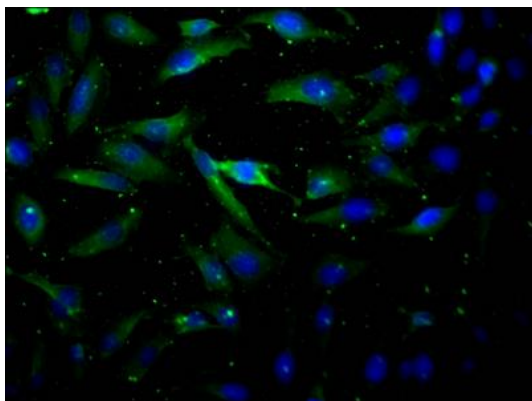
Storage:

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

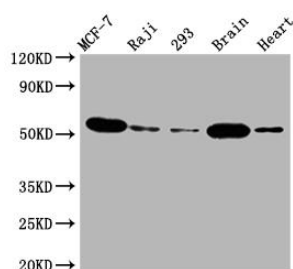
Product Images



IHC image of RACO0396 diluted at 1:100 and staining in paraffin-embedded human placenta tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



Immunofluorescence staining of HeLa Cells with RACO0396 at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).



Western Blot

Positive WB detected in(MCF-7 whole cell lysate) Raji whole cell lysate) 293 whole cell lysate) Mouse brain tissue, Rat heart tissue

All lanes: AKT1 antibody at 1:2000

Secondary

Goat polyclonal to rabbit IgG at 1:50000 dilution

Predicted band size: 56 kDa

Observed band size: 56 kDa