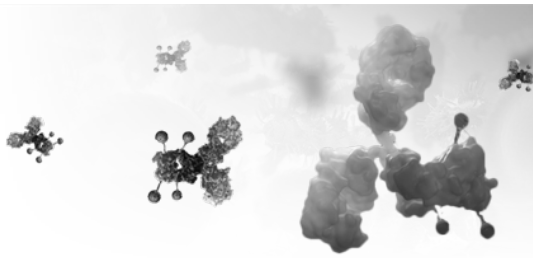

Rabbit Anti-AKT1/2/3 monoclonal antibody, clone TU59-10 (CABT-L674)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Target	AKT1/2/3
Immunogen	Recombinant protein
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Clone	TU59-10
Purification	Protein A purified.
Conjugate	Unconjugated
Applications	WB, ICC/IF, IHC, IP, FC
Molecular Weight	56 kDa
Cellular Localization	Nucleus, Cytoplasm, Membrane.
Positive Control	A549, MCF-7, CRC, SH-SY-5Y, mouse heart tissue, human kidney tissue, mouse brain tissue, mouse kidney tissue.
Format	Liquid
Size	100 µl
Buffer	1×TBS (pH7.4), 1% BSA, 40% Glycerol.

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221

Preservative	0.05% Sodium Azide
Storage	Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

BACKGROUND

Introduction	The serine/threonine kinase Akt family contains several members, including Akt1 (also designated PKB or RacPK), Akt2 (also designated PKBβ or RacPK-β) and Akt 3 (also designated PKBγ or thyoma viral proto-oncogene 3), which exhibit sequence homology with the protein kinase A and C families and are encoded by the c-Akt proto-oncogene. All members of the Akt family have a pleckstrin homology domain. Akt1 and Akt2 are activated by PDGF stimulation. This activation is dependent on PDGFR-β tyrosine residues 740 and 751, which bind the subunit of the phosphatidylinositol 3-kinase (PI 3-kinase) complex. Activation of Akt1 by insulin or insulin-growth factor-1(IGF-1) results in phosphorylation of both Thr 308 and Ser 473. Phosphorylation of both residues is important to generate a high level of Akt1 activity, and the phosphorylation of Thr 308 is not dependent on phosphorylation of Ser 473 in vivo. Thus, Akt proteins become phosphorylated and activated in insulin/IGF-1-stimulated cells by an upstream kinase(s). The activation of Akt1 and Akt2 is inhibited by the PI kinase inhibitor wortmannin, suggesting that the protein signals downstream of the PI kinases.
Keywords	AKT;AKT1;AKT1 kinase;AKT1m;AKT2;AKT2 kinase;Akt3;AKT3_HUMAN;CAKT;CWS6;DKFZp434N0250;HIHGHH;kinase Akt1;MGC99656;MPPH;Murine thymoma viral (v-akt) homolog 2;PKB ALPHA;PKB;PKB beta;PKB gamma;PKB-GAMMA;PKB/Akt;PKBALPHA;PKBB;PKBBETA;PKBG;PKBGAMMA;PRKBA;PRKBB;PRKBG;Protein kinase Akt 2;Protein kinase Akt-3;Protein kinase B alpha;Protein kinase B;Protein kinase B beta;Protein kinase B gamma;Proto oncogene c Akt;RAC ALPHA;RAC alpha serine/threonine protein kinase;RAC;RAC BETA;RAC beta serine/threonine protein kinase;RAC PK alpha;RAC PK beta;rac protein kinase alpha;rac protein kinase beta;RAC-gamma;RAC-gamma serine/threonine-protein kinase;RAC-PK-gamma;RACALPHA;RACalpha serine/threonine kinase;RACBETA;RACgamma;RACgamma serine/threonine protein kinase;RACPKgamma;serine threonine protein kinase;STK-2;STK2;thymoma viral proto oncogene 1;thymoma viral proto oncogene;V akt murine thymoma viral oncogene homolog 1;V akt murine thymoma viral oncogene homolog 2;V akt murine thymoma viral oncogene homolog 3 (protein kinase B, gamma);V akt murine thymoma viral oncogene homolog 3;vakt murine thymoma viral oncogene homolog 1;vakt murine thymoma viral oncogene homolog 2;vakt murine thymoma viral oncogene homolog 3 antibody

GENE INFORMATION

Entrez Gene ID	841

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221