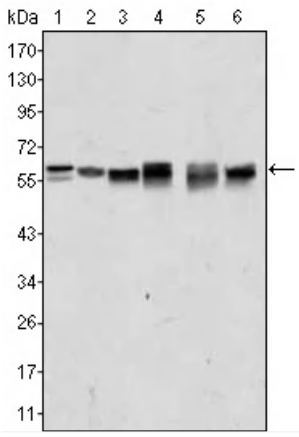
Akt2 Monoclonal Antibody

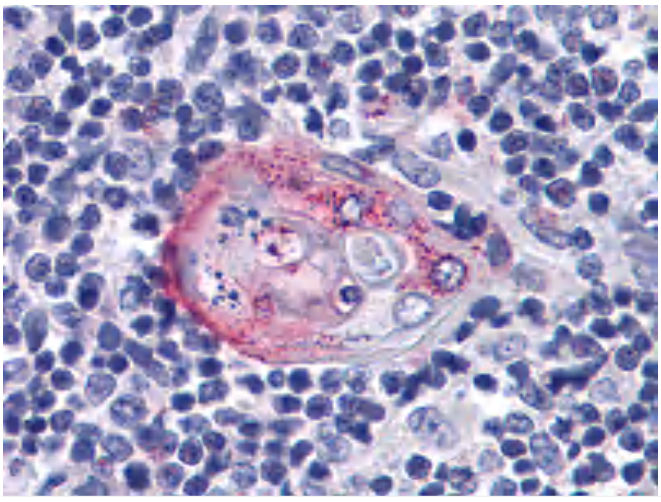
Catalog No	YP-Ab-14114
Isotype	IgG
Reactivity	Human;Rat;Monkey
Applications	WB;IHC;IF;ELISA
Gene Name	AKT2
Protein Name	RAC-beta serine/threonine-protein kinase
Immunogen	Purified recombinant fragment of human Akt2 expressed in E. Coli.
Specificity	Akt2 Monoclonal Antibody detects endogenous levels of Akt2 protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	AKT2; RAC-beta serine/threonine-protein kinase; Protein kinase Akt-2; Protein kinase B beta; PKB beta; RAC-PK-beta
Observed Band	56kD
Cell Pathway	Cytoplasm. Nucleus. Cell membrane; Peripheral membrane protein. Early endosome . Localizes within both nucleus and cytoplasm of proliferative primary myoblasts and mostly within the nucleus of differentiated primary myoblasts. By virtue of the N-terminal PH domain, is recruited to sites of the plasma membrane containing increased PI(3,4,5)P3 or PI(3,4)P2, cell membrane targeting is also facilitated by interaction with CLIP3. Colocalizes with WDFY2 in early endosomes (By similarity). .
Tissue Specificity	Expressed in all cell types so far analyzed.
Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,disease:Alterations of AKT2 may contribute to the pathogenesis of ovarian carcinomas.,enzyme regulation:Two specific sites, one in the kinase domain (Thr-309) and the other in the C-terminal regulatory region (Ser-474), need to be phosphorylated for its full activation.,function:General protein kinase capable of phosphorylating several known proteins.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. RAC subfamily.,similarity:Contains 1 AGC-kinase C-terminal domain.,similarity:Contains 1 PH domain.,similarity:Contains 1 protein kinase domain.,subunit:Interacts (via PH domain) with MTCP1, TCL1A AND

	TCL1B.,tissue specificity:In all human cell types so far analyzed.,
Background	This gene is a putative oncogene encoding a protein belonging to a subfamily of serine/threonine kinases containing SH2-like (Src homology 2-like) domains. The gene was shown to be amplified and overexpressed in 2 of 8 ovarian carcinoma cell lines and 2 of 15 primary ovarian tumors. Overexpression contributes to the malignant phenotype of a subset of human ductal pancreatic cancers. The encoded protein is a general protein kinase capable of phophorylating several known proteins. [provided by RefSeq, Jul 2008],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

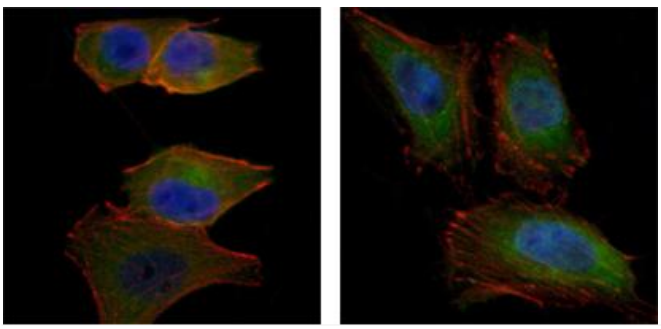
Products Images



Western Blot analysis using Akt2 Monoclonal Antibody against A431 (1), Jurkat (2), HEK293 (3), A549 (4), MCF-7 (5) and PC-12 (6) cell lysate.



Immunohistochemistry analysis of paraffin-embedded human Thymus tissues with AEC staining using Akt2 Monoclonal Antibody.



Immunofluorescence analysis of PANC-1 (left) and Hela (right) cells using Akt2 Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.