

Product datasheet for **TA323434**

AKT1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:500-1000, IHC: 1:50-100
Reactivity:	Human, Mouse, Rat
Modifications:	Phospho-specific
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Peptide sequence around phosphorylation site of serine 473 (Q-F-S(p)-Y-S) derived from Human Akt.
Formulation:	PBS pH7.3, 0.05% NaN ₃ , 50% glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	60 kDa
Gene Name:	AKT serine/threonine kinase 1
Database Link:	NP_005154 Entrez Gene 11651 Mouse Entrez Gene 24185 Rat Entrez Gene 207 Human P31749



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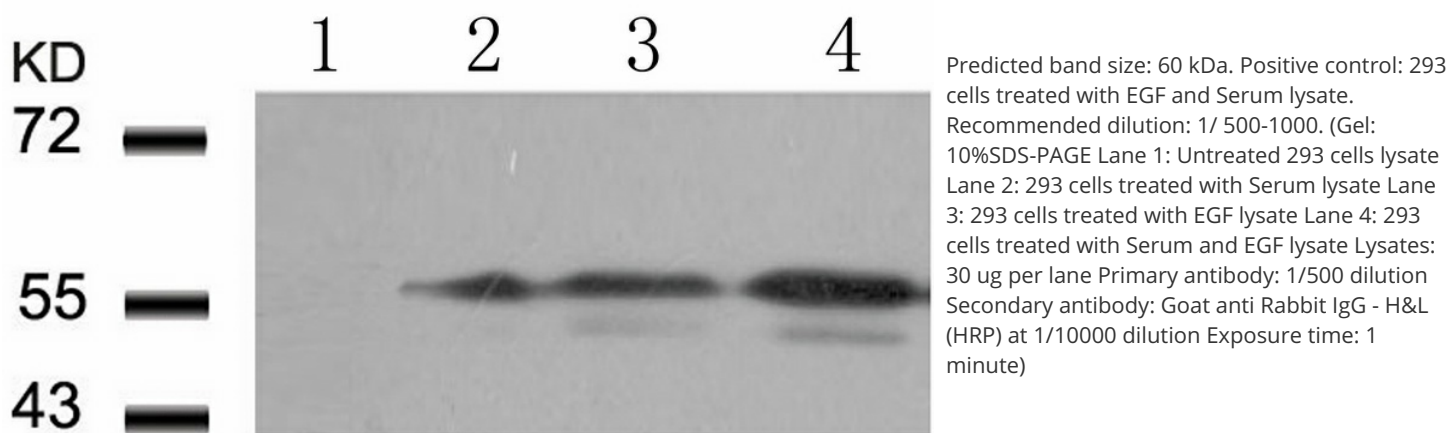
Background: General protein kinase capable of phosphorylating several known proteins. Phosphorylates TBC1D4. Signals downstream of phosphatidylinositol 3-kinase (PI3K) to mediate the effects of various growth factors such as platelet-derived growth factor (PDGF), epidermal growth factor (EGF), insulin and insulin-like growth factor I (IGF-I). Plays a role in glucose transport by mediating insulin-induced translocation of the GLUT4 glucose transporter to the cell surface. Mediates the antiapoptotic effects of IGF-I. Mediates insulin-stimulated protein synthesis by phosphorylating TSC2 at 'Ser-939' and 'Thr-1462', thereby activating mTORC1 signaling and leading to both phosphorylation of 4E-BP1 and in activation of RPS6KB1. Promotes glycogen synthesis by mediating the insulin-induced activation of glycogen synthase.

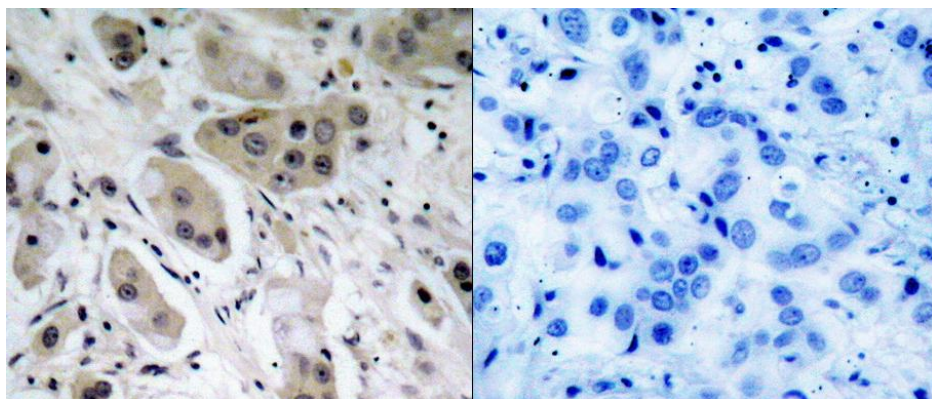
Synonyms: AKT; CWS6; PKB; PKB-ALPHA; PRKBA; RAC; RAC-ALPHA

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase

Protein Pathways: Acute myeloid leukemia, Adipocytokine signaling pathway, Apoptosis, B cell receptor signaling pathway, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Glioma, Insulin signaling pathway, Jak-STAT signaling pathway, MAPK signaling pathway, Melanoma, mTOR signaling pathway, Neurotrophin signaling pathway, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Progesterone-mediated oocyte maturation, Prostate cancer, Renal cell carcinoma, Small cell lung cancer, T cell receptor signaling pathway, Tight junction, Toll-like receptor signaling pathway, VEGF signaling pathway

Product images:





Predicted cell location: Cytoplasm; Nucleus; Cell membrane. Positive control: Human breast carcinoma tissue. Recommended dilution: 1/ 50-100 The image on the left is immunohistochemistry of paraffin-embedded human breast carcinoma tissue using AKT1 (Phospho-Ser473) antibody at dilution 1/50, on the right is treated with the synthetic peptide. (Original magnification: x200)