

Product datasheet for **TP321051**

AKT3 (NM_005465) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human v-akt murine thymoma viral oncogene homolog 3 (protein kinase B, gamma) (AKT3), transcript variant 1, 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC221051 representing NM_005465 Red =Cloning site Green =Tags(s)

MSDVTIVKEGWVQKRGEYIKNWRPRYFLLKTDGSGFIGYKEKPQDVDLPYPLNNFSVAKCQLMKTERPKPN
TFIIRCLQWTTVIERTFHVDTPEREWEATEAIQAVADRLQRQEEERMNCSPTSQIDNIGEEEMDASTHH
KRKTMNDFDYLLKLGKGTGKVLVREKASGKYAMKILKKEVIAKDEVAHTLTSRVLKNTRHPFLTS
LKYSFQTKDRLCFVMEYVNGGELFFHLSRERVFSEDRTRFYGAEIVSALDYLHSGKIVYRDLKLENLMLD
KDGHIKITDFGLCKEGITDAATMKTFCGTPEYLAPEVLEDNDYGRAVDWWGLGVVMYEMMCGRLPFYNQ
D
HEKLFELILMEDIKFPRTLSSDAKSLLSGLLIKDPNKRLLGGGPDDAKEIMRHSFFSGVNWQDVYDKKLV
PFPKQVTSSETDTRYFDEEFTAQTITITPPEKYDEDGMDCMDNERRPHFPQFSYSASGRE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	55.6 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

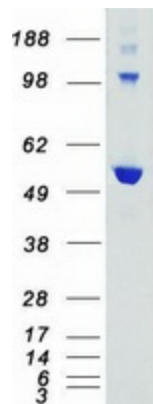
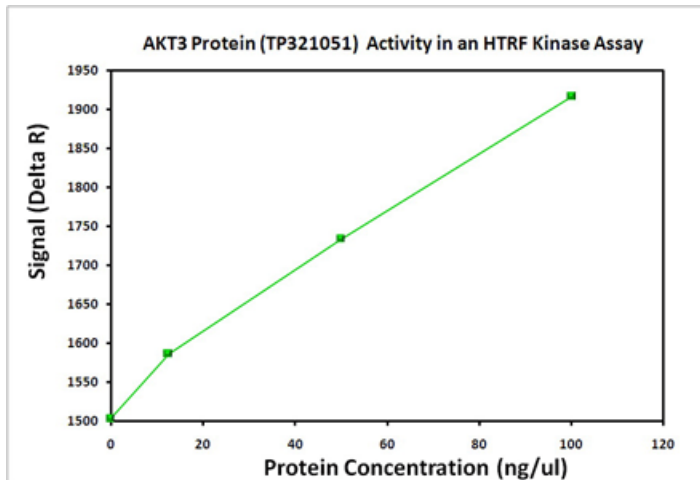


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Bioactivity:	AKT3 activity verified in a biochemical assay: AKT3 (-akt murine thymoma viral oncogene homolog 3 (protein kinase B, gamma) (TP321051) activity was measured in a homogeneous time-resolved fluorescent (HTRF®) assay. AKT3 is a serine/threonine kinase that plays a key in regulating cell survival, insulin signaling, angiogenesis and tumor formation. Varying concentrations of AKT3 were added to a reaction mix containing ATP and a biotinylated kinase substrate and the reaction mixture was incubated to allow the protein to phosphorylate the substrate. HTRF detection reagents were then added, and the time-resolved fluorescent signal was measured on a Flexstation 3 microplate reader. The time resolved fluorescent signal is expressed as “delta R” or “ΔR” and is a ratio calculated from the fluorescent emission intensities of the donor and acceptor fluors.
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_005456
Locus ID:	10000
UniProt ID:	Q9Y243
RefSeq Size:	3588
Cytogenetics:	1q43-q44
RefSeq ORF:	1437
Synonyms:	MPPH; MPPH2; PKB-GAMMA; PKBG; PRKBG; RAC-gamma; RAC-PK-gamma; STK-2
Summary:	The protein encoded by this gene is a member of the AKT, also called PKB, serine/threonine protein kinase family. AKT kinases are known to be regulators of cell signaling in response to insulin and growth factors. They are involved in a wide variety of biological processes including cell proliferation, differentiation, apoptosis, tumorigenesis, as well as glycogen synthesis and glucose uptake. This kinase has been shown to be stimulated by platelet-derived growth factor (PDGF), insulin, and insulin-like growth factor 1 (IGF1). Alternatively splice transcript variants encoding distinct isoforms have been described. [provided by RefSeq, Jul 2008]
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:


Coomassie blue staining of purified AKT3 protein (Cat# TP321051). The protein was produced from HEK293T cells transfected with AKT3 cDNA clone (Cat# [RC221051]) using MegaTran 2.0 (Cat# [TT210002]).