

## Product datasheet for **AP06562PU-N**

### AKT1 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500-1/1000. <b>Immunohistochemistry on paraffin sections:</b> 1/50-1/200. <b>Immunofluorescence:</b> 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 160-210 of Human PKA $\alpha$ .
Specificity:	This antibody detects endogenous levels of PKA $\alpha$ protein. (region surrounding Val191)
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 40, 42 kDa
Gene Name:	AKT serine/threonine kinase 1
Database Link:	<a href="#">Entrez Gene 207 Human P31749</a>



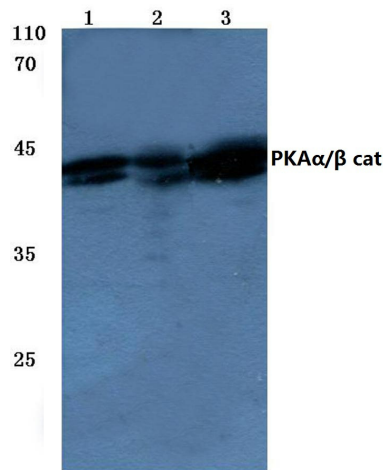
[View online »](#)

**Background:**

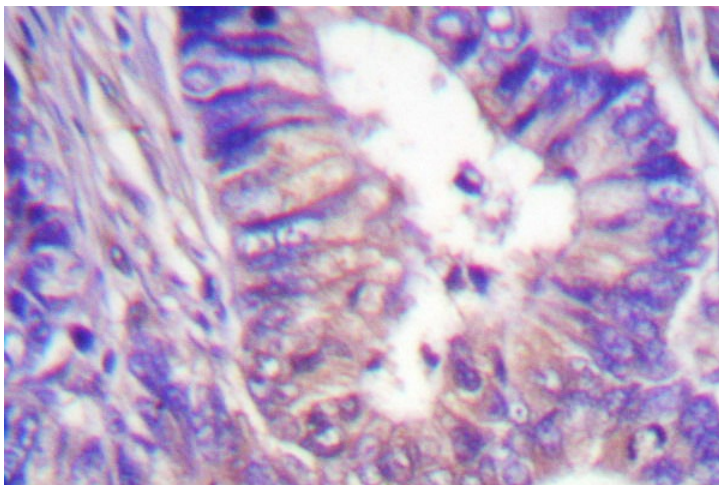
The second messenger cyclic AMP (cAMP) mediates diverse cellular responses to external signals such as proliferation, ion transport, regulation of metabolism and gene transcription by activation of the cAMP-dependent protein kinase (cAPK or PKA). Activation of PKA occurs when cAMP binds to the two regulatory subunits of the tetrameric PKA holoenzyme resulting in release of active catalytic subunits. Three catalytic (C) subunits have been identified, designated C $\alpha$ , C $\beta$  and C $\gamma$ , that each represent specific gene products. C $\alpha$  and C $\beta$  are closely related (93% amino acid sequence similarity), whereas C $\gamma$  displays 83% and 79% similarity to C $\alpha$  and C $\beta$ , respectively.

**Synonyms:**

Akt-1, RAC-PK-alpha, Protein kinase B, C-AKT

**Product images:**

Western blot (WB) analysis of PKA $\alpha/\beta$  cat antibody at 1/500 dilution Lane 1:HEK293T whole cell lysate Lane 2:Mouse liver tissue lysate Lane 3:Rat liver tissue lysate



Immunohistochemistry (IHC) analyzes of PKA $\alpha$  antibody in paraffin-embedded human colon carcinoma