

# Product datasheet for AP06562PU-S

## **AKT1 Rabbit Polyclonal Antibody**

**Product data:** 

**Product Type: Primary Antibodies** 

**Applications:** IF, IHC, WB

Recommended Dilution: Western blot: 1/500-1/1000.

Immunohistochemistry on paraffin sections: 1/50-1/200.

Immunofluorescence: 1/50-1/200.

Reactivity: Human, Mouse, Rat

Host: Rabbit

Clonality: Polyclonal

Immunogen: Synthetic peptide, corresponding to amino acids 160-210 of Human PKAa.

This antibody detects endogenous levels of PKACa protein. Specificity:

(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

Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Storage:

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: Entrez Gene 207 Human

P31749



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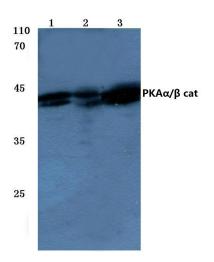
#### Background:

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.

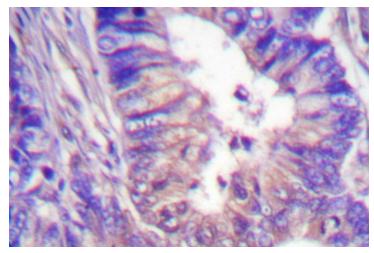
Synonyms:

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

### **Product images:**



Western blot (WB) analysis of PKAa/ $\beta$  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 PKACa antibody in paraffin-embedded human colon carcinoma