



## **Anti-Serine/threonine protein kinase(AKT), Chicken-Polyclonal Antibody**

**Catalog No.** PY-10176

**Antigen species:** Human

**Host species:** Chicken

**Quantity:** 100 $\mu$ g

**Reactivity:** Human, mouse, rat, bovine and xenopus

**Form:** Antigen affinity-purified antibody

**Applications:** Western blot

### **Target description**

AKT1 is a serine-threonine protein kinase. It is catalytically inactive in serum-starved primary and immortalized fibroblasts. AKT1 and the related AKT2 are activated by platelet-derived growth factor. The activation is rapid and specific, and it is abrogated by mutations in the pleckstrin homology domain of AKT1. It was shown that the activation occurs through phosphatidylinositol 3-kinase. In the developing nervous system AKT is a critical mediator of growth factor-induced neuronal survival. Survival factors can suppress apoptosis in a transcription-independent manner by activating the serine/ threonine kinase AKT1, which then phosphorylates and inactivates components of the apoptotic machinery.

### **Antigen**

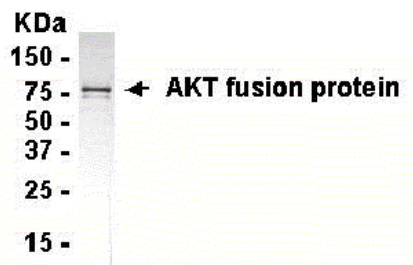
This polyclonal antibody was raised by immunizing chicken with AKT fusion protein (2-200 amino acids).

### **Application**

Western blotting, tissue or cell immunostaining. Recommended starting dilution for Western blot analysis is 1: 500, for tissue or cell staining is 1: 200. Optimal working dilutions must be determined by the end user.

### **Related Products**

1. Anti-serine/threonine protein kinase1 (AKT1), Chicken pAb (PY-10178)
2. Anti-serine/threonine protein kinase2 (AKT2), Chicken pAb (PY-10179)
3. Anti-serine/threonine protein kinase3 (AKT3), Chicken pAb (PY-10200)



*E. coli*-derived fusion protein as test antigen.

### **Western blot Protocol**

1. Block membrane with 5% non-fat milk in PBS-T for 1 hour at room temperature or longer at 4°C.
2. Incubate membrane with IgY antibodies at dilution of 1: 2,000 with 1% milk in PBS-T at R.T. for 1 h.
3. Rinse 3 times with PBS-T, then wash membrane with PBS-T, 5 min each, total of 3 times.
4. Incubate with 2nd antibody (goat-anti-IgY/Fc-HRP) at dilution 1: 1,000 for ECL (with 1% milk PBS-T) at R.T. for 1 h.
5. Rinse 3 times with PBS-T, then wash with PBS-T, 5 min each with shaking, total of 3 times.
6. Perform ECL detection of signal using Pierce ECL kit.

### **Storage**

It is supplied as antigen affinity purified antibody in lyophilized powder. Redissolve the powder with 100 microliter sterile water will restore to the original concentration 1mg/ml (1 $\times$ PBS). Store at 4°C for short-term application. For long-term storage, aliquot and store at -20°C.

### **References:**

1. Brunet, A., Bonni, A., Zigmond, M.J., Lin, M.Z., Juo, P., Hu, L.S., Anderson, M.J., Arden, K.C., Blenis, J. and Greenberg, M.E. Akt promotes cell survival by phosphorylating and inhibiting a Forkhead transcription factor *JOURNAL Cell* 96 (6), 857-868 (1999)

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