

## AKAP 149 Polyclonal Antibody

| Catalog No :             | YT0163  |
|--------------------------|---|
| Reactivity :             | Human;Rat;Mouse;  |
| Applications :           | WB;IHC;IF;ELISA   |
| Target :                 | AKAP 149  |
| Gene Name :              | AKAP1   |
| Protein Name :           | A-kinase anchor protein 1 mitochondrial   |
| Human Gene Id :          | 8165  |
| Human Swiss Prot<br>No : | Q92667  |
| Mouse Swiss Prot<br>No : | O08715  |
| Immunogen :              | The antiserum was produced against synthesized peptide derived from human AKAP1. AA range:281-330                         |
| Specificity :            | AKAP 149 Polyclonal Antibody detects endogenous levels of AKAP 149 protein.   |
| Formulation :            | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.   |
| Source :                 | Polyclonal, Rabbit,IgG  |
| Dilution :               | WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not yet tested in other applications.             |
| Purification :           | The antibody was affinity-purified from rabbit antiserum by affinity-<br>chromatography using epitope-specific immunogen. |
| Concentration :          | 1 mg/ml   |
| Storage Stability :      | -15°C to -25°C/1 year(Do not lower than -25°C)  |
| Observed Band :          | 90kD  |



| Background : | The A-kinase anchor proteins (AKAPs) are a group of structurally diverse proteins, which have the common function of binding to the regulatory subunit of protein kinase A (PKA) and confining the holoenzyme to discrete locations within the cell. This gene encodes a member of the AKAP family. The encoded protein binds to type I and type II regulatory subunits of PKA and anchors them to the mitochondrion. This protein is speculated to be involved in the cAMP-dependent signal transduction pathway and in directing RNA to a specific cellular compartment. [provided by RefSeq, Jul 2008],                             |
|--------------|--|
| Function :   | domain:RII-alpha binding site, predicted to form an amphipathic helix, could<br>participate in protein-protein interactions with a complementary surface on the R-<br>subunit dimer.,function:Binds to type I and II regulatory subunits of protein kinase<br>A and anchors them to the cytoplasmic face of the mitochondrial outer<br>membrane.,similarity:Contains 1 KH domain.,similarity:Contains 1 Tudor<br>domain.,tissue specificity:AKAP149 is highly expressed in prostate and small<br>intestine whereas S-AKAP84 is expressed in kidney, pancreas, liver, lung and<br>brain. AKAP149 is also expressed in colon carcinoma., |
| Subcellular  | Mitochondrion outer membrane . Mitochondrion .   |
| Location :   |  |
| Expression : | Isoform 1 is detected in thymus, prostate, testis, ovary, colon and small intestine (PubMed:8769136). Isoform 2 is highly expressed in testis and detected at much lower levels in kidney, pancreas, liver, lung and brain (PubMed:7499250).   |
|              |  |



## **Products Images**

Western Blot analysis of various cells using AKAP 149 Polyclonal Antibody diluted at 1:2000





Immunofluorescence analysis of COS7 cells, using AKAP1 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using AKAP1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HUVEC and COLO cells, using AKAP1 Antibody. The lane on the right is blocked with the synthesized peptide.