

## **Product datasheet for TA392931**

# **Tuberin (TSC2) Rabbit Polyclonal Antibody**

#### **Product data:**

**Product Type:** Primary Antibodies

Applications: WB

Recommended Dilution: WB: 1:500~1:1000

Reactivity: Human

Host: Rabbit

Isotype: IgG

Clonality: Polyclonal

**Immunogen:** Synthetic phosphopeptide derived from human Tuberin around the phosphorylation site of

Threonine 1462.

**Specificity:** p-Tuberin (T1462) pAb detects endogenous levels of Tuberin protein only when

phosphorylated at Thr1462.

Formulation: Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

Concentration: 1mg/ml

Conjugation: Unconjugated

Storage: Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

Stability: 1 year

**Predicted Protein Size:** ~ 200 kDa

**Gene Name:** tuberous sclerosis 2

Database Link: Entrez Gene 7249 Human

P49815



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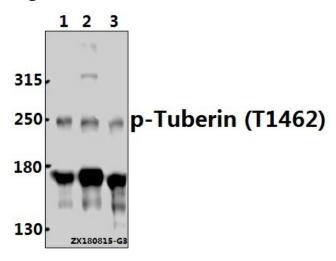
#### Background:

Tuberin is a product of the TSC2 tumor suppressor gene and an important regulator of cell proliferation and tumor development. Mutations in either TSC2 or the related TSC1 (hamartin) gene cause tuberous sclerosis complex (TSC), an autosomal dominant disorder characterized by development of multiple, widespread non-malignant tumors. Tuberin is directly phosphorylated at Thr1462 by Akt/PKB. Phosphorylation at Thr1462 and Tyr1571 regulates tuberin-hamartin complexes and tuberin activity. In addition, tuberin inhibits the mammalian target of rapamycin (mTOR), which promotes inhibition of p70 S6 kinase, activation of eukaryotic initiation factor 4E binding protein 1 (4E-BP1, an inhibitor of translation initiation), and eventual inhibition of translation.

**Synonyms:** TSC2; TSC4; Tuberin; Tuberous sclerosis 2 protein

**Note:** For research use only, not for use in diagnostic procedure.

### **Product images:**



Western blot (WB) analysis of p-Tuberin (T1462) pAb at 1:500 dilution Lane1:L02 whole cell lysate(40ug) Lane2:A549 whole cell lysate(40ug) Lane3:SGC7901 whole cell lysate(40ug)