



## tuberin (1-300): sc-4324 WB

### BACKGROUND

Tuberous sclerosis (TSC) is a human genetic disorder characterized by mental retardation and the widespread development of benign and infrequently malignant tumors in a variety of tissues. Two different genetic loci have been linked to TSC; one of these loci, the tuberous sclerosis-2 gene (TSC2), encodes a 180 kDa protein, 1784 amino acids in length, called tuberin. Tuberin exhibits a region of limited homology to the catalytic domain of Rap1 GAP. Subcellular fractionation studies have shown tuberin to be predominantly localized in membrane fractions. Tuberin is capable of stimulating the intrinsic GTPase activity of Rap 1A, but not Rap 2, H-Ras, Rac or Rho. TSC2 maps to human chromosome 16 and is associated with several intragenic mutations in affected patients. The mouse homolog of the tuberin gene maps to chromosome 17.

### REFERENCES

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### SOURCE

tuberin (1-300) is expressed in *E. coli* as a 60 kDa tagged fusion protein corresponding to amino acids 1-300 of tuberin of human origin.

### PRODUCT

tuberin (1-300) is purified from bacterial lysates (>98%) by column chromatography; supplied as 10 µg in 0.1 ml SDS-PAGE loading buffer.

### APPLICATIONS

tuberin (1-300) is suitable as a Western blotting control for sc-892 and sc-13012.

### STORAGE

Store at -20° C; stable for one year from the date of shipment.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.