

Product datasheet for **SP2163P**

Hamartin (TSC1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, WB
Recommended Dilution:	Western blot (1 µg/ml, detects a band of approximately 130 kDa in mouse EL4 cell lysates). Immunocytochemistry. Has been reported as suitable for use in IHC on mouse EL4 cell cytospins at 2 µg/ml.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	A 15 amino acid peptide located near the centre of human TSC1
Specificity:	This antibody recognises an epitope within the internal region of the 130 kDa tumour suppressor protein, Tumour sclerosis complex 1 (TSC1).
Formulation:	Phosphate buffered saline, 0.02 % Sodium Azide State: Aff - Purified State: Liquid Ig fraction
Concentration:	lot specific
Purification:	Affinity chromatography
Conjugation:	Unconjugated
Storage:	Store the antibody at 2 - 8 °C up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing. Should this product contain a precipitate we recommend microcentrifugation before use.
Stability:	Shelf life: one year from despatch.
Gene Name:	tuberous sclerosis 1
Database Link:	Entrez Gene 7248 Human Q92574



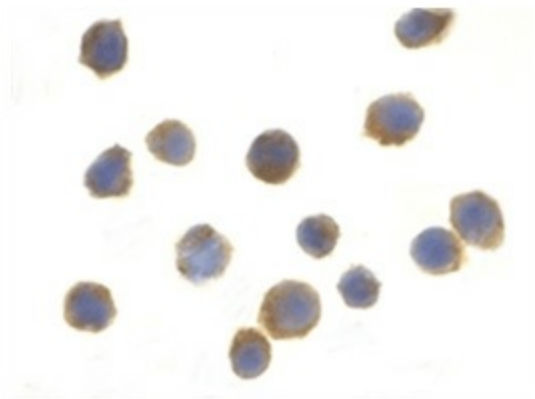
[View online »](#)

Background:

Mutation within the TSC1 gene is responsible for Tuberous sclerosis (TSC), an autosomal dominant genetic disorder associated with the development of benign tumors (hamartomas), a condition also induced by mutation of the Tumour sclerosis complex 2 (TSC2) gene. Many proteins have been shown to play a role in the regulation of the serine/threonine kinase known as target of rapamycin (TOR), a central component in a complex signaling pathway which controls cell proliferation and cell cycle progression. Negative regulation of TOR activity occurs following the over-expression of the TSC1 and TSC2 gene products, hamartin and tuberlin. These act by suppressing the phosphorylation of eukaryotic translation initiation factor 4E binding protein 1 (4EBP1) and ribosomal protein S6 kinase (S6K), downstream targets of TOR involved in mRNA translation. Furthermore the TOR activator protein Rheb has been identified as a target of TSC1-TSC2 complexes.

Synonyms:

KIAA0243, TSC, Tuberous sclerosis 1 protein

Product images:

Immunocytochemical staining of EL4 cells with Rabbit anti Human TSC1