

# Rabbit Anti-TUB 1 antibody

# SL11536R

Product Name:	TUB 1
Chinese Name:	TUB蛋白抗体
Alias:	F10B5.4; rd5; TUB 1; TUB; TUB_HUMAN; Tubby homologue; Tubby protein
	homolog 1; Tubby protein homolog.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Pig, Cow, Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-
	500IF=1:100-500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	56kDa
Cellular localization:	The nucleuscytoplasmicThe cell membraneSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TUB 1:241-305/506
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 癈 for one year. Avoid repeated freeze/thaw cycles. The lyophilized
	antibody is stable at room temperature for at least one month and for greater than a year
	when kept at -20癈. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
	antibody the antibody is stable for at least two weeks at 2-4 癈.
PubMed:	PubMed
Product Detail:	In contrast to the rapid early-onset weight gain seen in ob/ob mice (1-3), mutations in
	the tub gene lead to obesity gradually and strongly resemble late-onset obesity as seen
	in the human population (4). In addition to excessive deposition of adipose tissue, mice
	with the tub phenotype also suffer retinal degeneration and neurosensory hearing loss
	(4-6). The tripartite character of tubby phenotype is strikingly similar to human obesity

syndromes such as Alstr鰉 (5) and Bardet-Biedl (6). A candidate for the tub gene has been described (4). A G芓 transversion in this candidate gene eliminates a donor splice site in the 3' coding region resulting in a larger transcript containing an unspliced intron (4). A second prematurely truncated mRNA transcript with the unspliced intron was found to be expressed in the brains of tubby mice at a 2-3 fold higher rate as compared to B6 mice (4). It has been postulated that the phenotypic features of tubby mice can be attributed to cellular apoptosis triggered by the expression of a mutated tub gene (4).

#### Function:

Functions in signal transduction from heterotrimeric G protein-coupled receptors. Binds to membranes containing phosphatidylinositol 4,5-bisphosphate. Can bind DNA (in vitro). May contribute to the regulation of transcription in the nucleus. Could be involved in the hypothalamic regulation of body weight (By similarity). Contribute to stimulation of phagocytosis of apoptotic retinal pigment epithelium (RPE) cells and macrophages.

#### **Subunit:**

Interacts with GNAQ (By similarity). Interacts with TULP1

#### **Subcellular Location:**

Cytoplasm. Nucleus. Secreted. Cell membrane. Binds phospholipid and is anchored to the plasma membrane through binding phosphatidylinositol 4,5-bisphosphate. Is released upon activation of phospholipase C. Translocates from the plasma membrane to the nucleus upon activation of guanine nucleotide-binding protein G(q) subunit alpha. Does not have a cleavable signal peptide and is secreted by a non-conventional pathway.

Similarity:

Belongs to the TUB family.

SWISS: P50607

Gene ID:

7275

### Database links:

Entrez Gene: 7275Human

Entrez Gene: 22141 Mouse

Omim: 601197Human

SwissProt: P50607Human

SwissProt: P50586Mouse

Unigene: 568986Human

Unigene: 720186Human

## Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

