

Rabbit Anti-TCAB1/Cy5 Conjugated antibody

SL8163R-Cy5

Product Name	Anti-TCAB1/Cy5
Chinese Name	Cy5 标记的端粒酶卡哈尔体蛋白抗体
Alias	FLJ10385; TCAB1; telomerase Cajal Body protein 1; WD repeat containing protein 79; WRAP53; WDR79/TCAB1; WAP53_HUMAN.
Research Area	Tumour Cell biology immunology
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Mouse,Rat(predicted:Horse,Rabbit) IF=1:100-500
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	60kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human WDR79/TCAB1 (304-347aa)
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. Store at -20 °C 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°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Storage	
Product Detail	background: WDR79 contains six WD (tryptophan-aspartate) repeat domains found in a number of proteins that function as adaptor molecules in signal transduction and cytoskeletal organization. The WD repeat is defined by four or more repeating units of a conserved core of approximately 40 amino acids ending with tryptophan-aspartic acid (WD). WD repeats may serve as sites of protein-protein interaction for adaptor proteins and facilitate multiprotein

complex formation. The function of the WDR79 protein has not been characterized, however significant and consistent single nucleotide polymorphisms in the WDR79 gene have been found to be associated with ER negative breast cancer.

Function:

Essential component of the telomerase holoenzyme complex, a ribonucleoprotein complex essential for the replication of chromosome termini that elongates telomeres in most eukaryotes. In the telomerase holoenzyme complex, it controls telomerase localization to Cajal body. Required for delivery of TERC to telomeres during S phase and for telomerase activity. Binds small Cajal body RNAs (scaRNAs). The mRNA encoding this protein plays a critical role in the regulation of p53 expression at the post-transcriptional level; it is involved both in maintaining basal p53 mRNA levels and in p53 induction upon DNA damage.

Subunit:

Component of the telomerase holoenzyme complex at least composed of TERT, DKC1, WRAP53/TCAB1, NOP10, NHP2, GAR1, TEPI1, EST1A, POT1 and a telomerase RNA template component (TERC).

Subcellular Location:

Nucleus, Cajal body. Cytoplasm.

Tissue Specificity:

Expressed in all tissues and cell lines examined.

Post-translational modifications:

Phosphorylated upon DNA damage, probably by ATM or ATR.

DISEASE:

Defects in WRAP53 are the cause of dyskeratosis congenital autosomal recessive type 3 (DKCB3) [MIM:613988]. A rare multisystem disorder caused by defective telomere maintenance. It is characterized by progressive bone marrow failure, and the clinical triad of reticulated skin hyperpigmentation, nail dystrophy, and mucosal leukoplakia. Common but variable features include premature graying, aplastic anemia, low platelets, osteoporosis, pulmonary fibrosis, and liver fibrosis among others. Early mortality is often associated with bone marrow failure, infections, fatal pulmonary complications, or malignancy.

Similarity:

Contains 6 WD repeats

Database links:

UniProtKB/Swiss-Prot: Q9BUR4.1

Important Note:

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

TCAB1 是端粒酶的一个真正组成部分。但它对酶的活性来说并不是必需的，它只是给称为卡哈尔体（Cajal bodies）的 The nucleus 中的处理和保持区域补充端粒酶复合物。卡哈尔体将对各种使用 RNA 小分子来引领其活性的蛋白进行修饰，譬如，端粒酶使用 RNA 分子作为嵌在染色体末端的 DNA 链的模板。在适当的时候，TCAB1 将端粒酶复合物运送到新复制染色体的等待端。研究人员认为，TCAB1 蛋白可能是一种负责将各种分子运往其目的地的普通生物运输器。