

# Anti-Telomerase reverse transcriptase (phospho S824) antibody ab63558

★★★★★ [1 Abreviews](#) [2 References](#) [1 图像](#)

### 概述

产品名称	Anti-Telomerase reverse transcriptase (phospho S824)抗体
描述	兔多克隆抗体 to Telomerase reverse transcriptase (phospho S824)
宿主	Rabbit
特异性	ab63558 detects endogenous levels of TERT only when phosphorylated at serine 824.
经测试应用	<b>适用于:</b> WB
种属反应性	<b>与反应:</b> Human
免疫原	Synthetic peptide corresponding to Human Telomerase reverse transcriptase (phospho S824). Synthesized phosphopeptide derived from human Telomerase around the phosphorylation site of serine 824 (G-K-SP-Y-V). Database link: <a href="#">O14746</a>
阳性对照	extracts from COLO205 cells
常规说明	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### 性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride
纯度	Immunogen affinity purified
纯化说明	The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

克隆

多克隆

同种型

IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab63558于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★★★ (1)	1/500 - 1/1000. Predicted molecular weight: 127 kDa.

靶标

功能

Telomerase is a ribonucleoprotein enzyme essential for the replication of chromosome termini in most eukaryotes. Active in progenitor and cancer cells. Inactive, or very low activity, in normal somatic cells. Catalytic component of the teleromerase holoenzyme complex whose main activity is the elongation of telomeres by acting as a reverse transcriptase that adds simple sequence repeats to chromosome ends by copying a template sequence within the RNA component of the enzyme. Catalyzes the RNA-dependent extension of 3'-chromosomal termini with the 6-nucleotide telomeric repeat unit, 5'-TTAGGG-3'. The catalytic cycle involves primer binding, primer extension and release of product once the template boundary has been reached or nascent product translocation followed by further extension. More active on substrates containing 2 or 3 telomeric repeats. Telomerase activity is regulated by a number of factors including telomerase complex-associated proteins, chaperones and polypeptide modifiers. Modulates Wnt signaling. Plays important roles in aging and antiapoptosis.

组织特异性

Expressed at a high level in thymocyte subpopulations, at an intermediate level in tonsil T lymphocytes, and at a low to undetectable level in peripheral blood T lymphocytes.

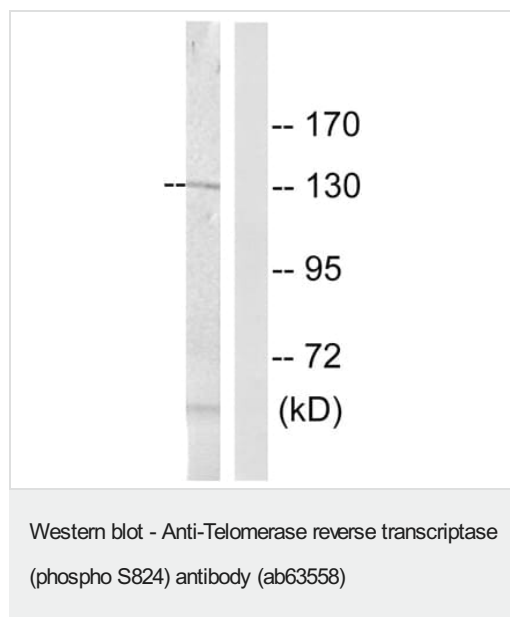
疾病相关

Note=Activation of telomerase has been implicated in cell immortalization and cancer cell pathogenesis.  
Defects in TERT are associated with susceptibility to aplastic anemia (AA) [MIM:609135]. AA is a rare disease in which the reduction of the circulating blood cells results from damage to the stem cell pool in bone marrow. In most patients, the stem cell lesion is caused by an autoimmune attack. T-lymphocytes, activated by an endogenous or exogenous, and most often unknown antigenic stimulus, secrete cytokines, including IFN-gamma, which would in turn be able to suppress hematopoiesis.  
Note=Genetic variations in TERT are associated with coronary artery disease (CAD).  
Defects in TERT are a cause of dyskeratosis congenita autosomal dominant (ADCK) [MIM:127550]; also known as dyskeratosis congenita Scoggins type. ADCK is a rare, progressive bone marrow failure syndrome characterized by the triad of reticulated skin hyperpigmentation, nail dystrophy, and mucosal leukoplakia. Early mortality is often associated with bone marrow failure, infections, fatal pulmonary complications, or malignancy.  
Defects in TERT are a cause of susceptibility to pulmonary fibrosis idiopathic (IPF) [MIM:178500]. Pulmonary fibrosis is a lung disease characterized by shortness of breath, radiographically evident diffuse pulmonary infiltrates, and varying degrees of inflammation and fibrosis on biopsy. It results in acute lung injury with subsequent scarring and endstage lung disease.  
Belongs to the reverse transcriptase family. Telomerase subfamily.  
Contains 1 reverse transcriptase domain.

序列相似性

<b>结构域</b>	<p>The primer grip sequence in the RT domain is required for telomerase activity and for stable association with short telomeric primers.</p> <p>The RNA-interacting domain 1 (RD1)/N-terminal extension (NTE) is required for interaction with the pseudoknot-template domain of each of TERC dimers. It contains anchor sites that bind primer nucleotides upstream of the RNA-DNA hybrid and is thus an essential determinant of repeat addition processivity.</p> <p>The RNA-interacting domain 2 (RD2) is essential for both interaction with the CR4-CR5 domain of TERC and for DNA synthesis.</p>
<b>翻译后修饰</b>	<p>Ubiquitinated, leading to proteasomal degradation.</p> <p>Phosphorylation at Tyr-707 under oxidative stress leads to translocation of TERT to the cytoplasm and reduces its antiapoptotic activity. Dephosphorylated by SHP2/PTPN11 leading to nuclear retention. Phosphorylation by the AKT pathway promotes nuclear location.</p>
<b>细胞定位</b>	<p>Nucleus &gt; nucleolus. Nucleus &gt; nucleoplasm. Nucleus. Chromosome &gt; telomere. Cytoplasm. Nucleus &gt; PML body. Shuttling between nuclear and cytoplasm depends on cell cycle, phosphorylation states, transformation and DNA damage. Diffuse localization in the nucleoplasm. Enriched in nucleoli of certain cell types. Translocated to the cytoplasm via nuclear pores in a CRM1/RAN-dependent manner involving oxidative stress-mediated phosphorylation at Tyr-707. Dephosphorylation at this site by SHP2 retains TERT in the nucleus. Translocated to the nucleus by phosphorylation by AKT.</p>

## 图片



**All lanes :** Anti-Telomerase reverse transcriptase (phospho S824) antibody (ab63558) at 1/500 dilution

**Lane 1 :** extracts from COLO205 cells

**Lane 2 :** extracts from COLO205 cells plus immunising peptide at 10ug

Lysates/proteins at 30 µg per lane.

**Predicted band size:** 127 kDa

**Observed band size:** 130 kDa

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.cn/abpromise> or contact our technical team.

#### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors