

Datasheet for ABIN7180098  
**anti-TK1 antibody (Ser13)**[Go to Product page](#)

## 3 Images

## Overview

Quantity:	100 µL
Target:	TK1
Binding Specificity:	Ser13
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TK1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF)

## Product Details

Immunogen:	Synthesized non-phosphopeptide derived from Human TK around the phosphorylation site of serine 13 (P-G-S(p)-P-S).
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Purification:	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

## Target Details

Target:	TK1
Alternative Name:	TK1 ( <a href="#">TK1 Products</a> )

## Target Details

**Background:** Background: Thymidine kinases play a critical role in generating the DNA synthetic precursor deoxythymidine triphosphate (dTTP) by catalyzing the phosphotransfer of phosphate from ATP to deoxythymidine (dT) and thymidine (T) in the cell. TK1 expression and activity is regulated in a cell cycle-dependent manner, accumulating during G1-phase to peak levels in S-phase before being degraded prior to cell division. Stability, but not activity, may be regulated via phosphorylation of TK1 at Ser13 by Cdc2 and/or Cdk2, but the precise mode of regulation remains elusive. These observations indicate that TK1 might be a useful marker of cell proliferation, however, recent studies have shown that TK1 plays a more significant role in the DNA damage response.

N Singh, Mol. Cell. Biol., May 1991, 11: 2362 - 2374.

Bin Tian, Am. J. Pathol., Aug 2003, 163: 789.

RenGerolami, Cancer Res., Feb 2000, 60: 993 - 1001.

Catia Traversari, Blood, Jun 2007, 109: 4708 - 4715

Aliases: cytosolic antibody, KITH\_HUMAN antibody, Thymidine kinase 1 antibody, Thymidine kinase 1 soluble antibody, Thymidine kinase 1 soluble isoform antibody, Thymidine kinase antibody, Thymidine kinase cytosolic antibody, TK 1 antibody, TK 2 antibody, TK1 antibody, Tk1a antibody, Tk1b antibody, TK2 antibody

**UniProt:** [P04183](#)

## Application Details

**Application Notes:** WB:1:500-1:3000, IHC:1:50-1:100, IF:1:100-1:500,

**Restrictions:** For Research Use only

## Handling

**Format:** Liquid

**Buffer:** Rabbit IgG in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.

**Preservative:** Sodium azide

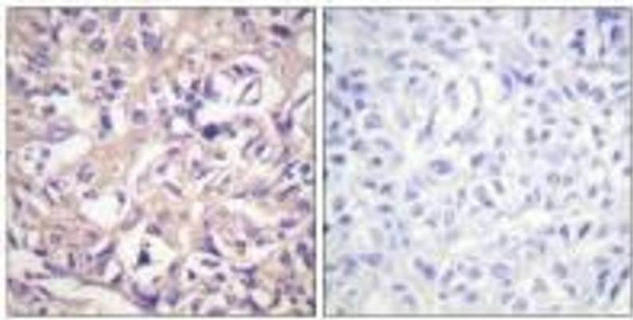
**Precaution of Use:** This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

**Storage:** -20 °C, -80 °C

## Handling

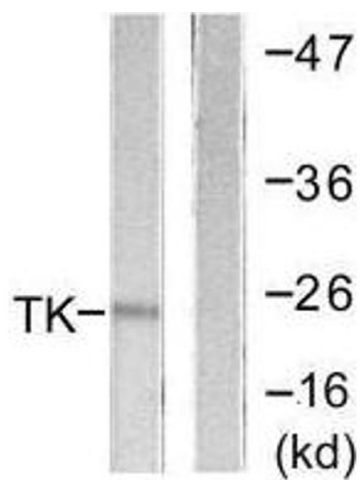
Storage Comment: Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

## Images



### Immunohistochemistry

**Image 1.** Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue using TK (Ab-13) antibody.



### Western Blotting

**Image 2.** Western blot analysis of extracts from COLO205 cells, using TK (Ab-13) antibody.



### Immunofluorescence

**Image 3.** Immunofluorescence analysis of HepG2 cells, using TK (Ab-13) antibody.