



# Mouse Anti-Human TK1 Monoclonal Antibody, clone TMN-13 (CABT-Z627M)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

Immunogen	Human TK1.
Isotype	IgG1, κ
Source/Host	Mouse
Species Reactivity	Human
Clone	TMN-13
Purification	Purified
Conjugate	Unconjugated
Applications	IHC-P
Format	Liquid
Concentration	Lot specific
Size	3 ml, 6 ml
Preservative	None
Storage	Store at 2-8°C. Do not freeze.
Ship	Wet ice

## BACKGROUND

## Introduction

Thymidine kinase is an enzyme, a phosphotransferase (a kinase): 2'-deoxythymidine kinase, ATP-thymidine 5'-phosphotransferase, EC 2.7.1.21. It can be found in most living cells. It is present in two forms in mammalian cells, TK1 and TK2. Certain viruses also have genetic information for expression of viral thymidine kinases. Thymidine kinase catalyzes the reaction:  $\text{Thd} + \text{ATP} \rightarrow \text{TMP} + \text{ADP}$ , where Thd is (deoxy)thymidine, ATP is adenosine triphosphate, TMP is (deoxy)thymidine monophosphate and ADP is adenosine diphosphate. Thymidine kinases have a key function in the synthesis of DNA and therefore in cell division, as they are part of the unique reaction chain to introduce thymidine into the DNA. Thymidine is present in the body fluids as a result of degradation of DNA from food and from dead cells. Thymidine kinase is required for the action of many antiviral drugs. It is used to select hybridoma cell lines in production of monoclonal antibodies. In clinical chemistry it is used as a proliferation marker in the diagnosis, control of treatment and follow-up of malignant disease, mainly of hematological malignancies.

## Keywords

cytosolic;KITH\_HUMAN;Thymidine kinase 1;Thymidine kinase 1 soluble;Thymidine kinase 1 soluble isoform;Thymidine kinase

# GENE INFORMATION

Gene Name	TK1
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Entrez Gene ID	<a href="#">7083</a>
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UniProt ID	<a href="#">P04183</a>
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