

Product Name: KD-Validated Thymidine Kinase 1 Recombinant Rabbit Monoclonal Antibody

Catalog #: KVA01263

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:4,000-1:20,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 25.5kDa

Antigen Information

Gene Name	TK1
Alternative Names	TK1; Thymidine Kinase 1; Thymidine Kinase, Cytosolic; Cytosolic Thymidine Kinase; EC 2.7.1.21; Epididymis Secretory Sperm Binding Protein; Thymidine Kinase 1, Soluble; TK2
Gene ID	7083.0
SwissProt ID	P04183
Immunogen	A synthesized peptide derived from human Thymidine Kinase 1

Background

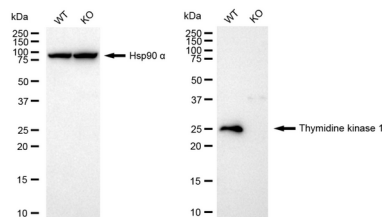
The protein encoded by this gene is a cytosolic enzyme that catalyzes the addition of a gamma-phosphate group to thymidine. This creates dTMP and is the first step in the biosynthesis of dTTP, which is one component required for DNA replication. The

encoded protein, whose levels fluctuate depending on the cell cycle stage, can act as a low activity dimer or a high activity tetramer. High levels of this protein have been used as a biomarker for diagnosing and categorizing many types of cancers. [provided by RefSeq, Oct 2016]

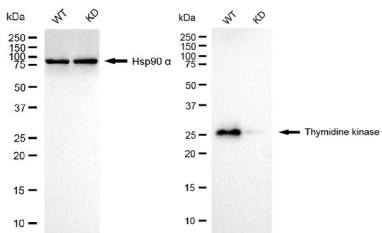
Research Area

Epigenetics and Nuclear Signaling

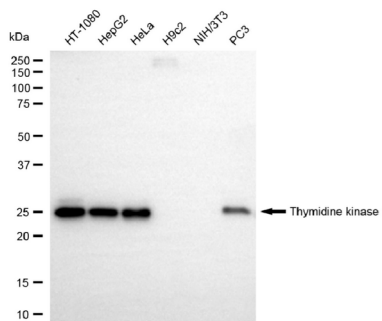
Image Data



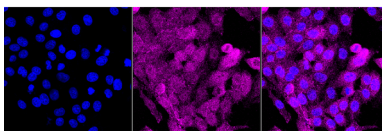
Western blotting analysis using thymidine kinase 1 antibody (KVA01263). Thymidine kinase 1 expression in wild-type (WT) and thymidine kinase 1 (TK1) knockout (KO) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with thymidine kinase 1 antibody (KVA01263, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



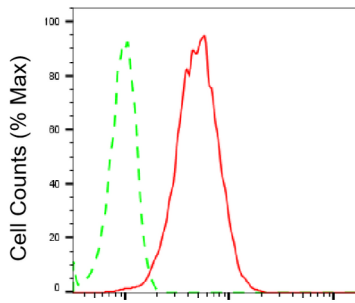
Western blotting analysis using thymidine kinase 1 antibody (KVA01263). Thymidine kinase 1 expression in wild-type (WT) and thymidine kinase 1 (TK1) knockdown (KD) HSHC cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with thymidine kinase 1 antibody (KVA01263, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using thymidine kinase 1 antibody (KVA01263). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with thymidine kinase 1 antibody (KVA01263, 1:20,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with Thymidine kinase 1 antibody (KVA01263, 1:1,000). Nuclei were stained blue with DAPI; Thymidine kinase 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Flow cytometric analysis of Thymidine kinase 1 expression in HepG2 cells using Thymidine kinase 1 antibody (KVA01263, 1:2,000). Green, isotype control; red, Thymidine kinase 1.

Thymidine kinase 1-Alexa Fluor® 647