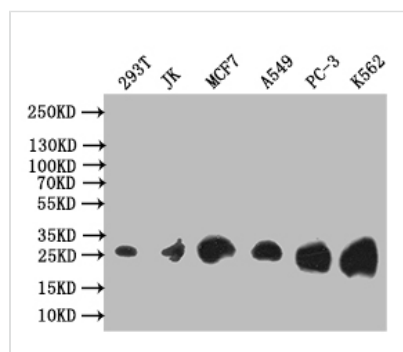




TK1 Recombinant Monoclonal Antibody

Product Code	CSB-RA931459A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P04183
Immunogen	A synthesized peptide derived from Human TK1
Species Reactivity	Human
Tested Applications	ELISA, WB, IF, FC; Recommended dilution: WB:1:500-1:2000, IF:1:50-1:200, FC:1:50-1:200
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling
Gene Names	TK1
Clone No.	6F6

Image



Western Blot

Positive WB detected in: 293T whole cell lysate, JK whole cell lysate, MCF7 whole cell lysate, A549 whole cell lysate, PC-3 whole cell lysate, K562 whole cell lysate

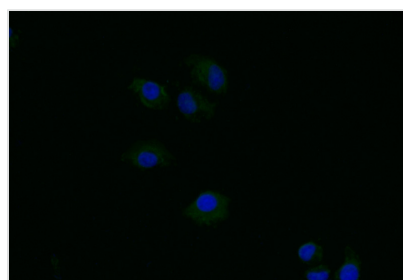
All lanes: Thymidine Kinase 1 antibody at 1:1000

Secondary

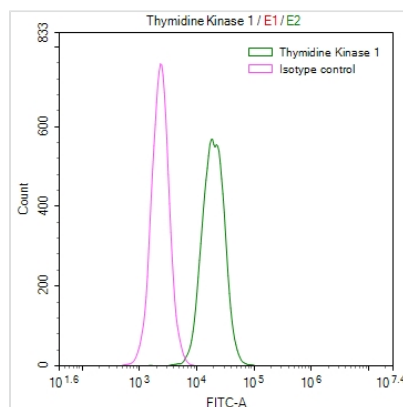
Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 26 kDa

Observed band size: 26 kDa



Immunofluorescence staining of HeLa with CSB-RA931459A0HU at 1:40, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 491-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Overlay Peak curve showing Hela cells stained with CSB-RA931459A0HU (red line) at 1:50. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1 μ g/1 \times 10⁶ cells) for 45min at 4 $^{\circ}$. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4 $^{\circ}$. Control antibody (green line) was rabbit IgG (1 μ g/1 \times 10⁶ cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The TK1 recombinant monoclonal antibody production generally commences with the insertion of the TK1 antibody-encoding gene into expression vectors. These vectors are subsequently delivered into host cells through polyethyleneimine-mediated transfection. The host cells, housing these vectors, are cultured to generate and release the antibodies. Following purification via affinity chromatography, the antibodies are subjected to assessments through ELISA, WB, IF, and FC tests, confirming their ability to recognize the human TK1 protein.

Thymidine kinase (TK1) is a critical enzyme involved in DNA synthesis and nucleotide salvage pathways. Its primary function is to phosphorylate thymidine, generating essential nucleotide precursors for DNA replication. Beyond its fundamental role in DNA metabolism, thymidine kinase has clinical applications in antiviral and anticancer therapies and serves as a diagnostic marker for certain diseases.