

Product datasheet

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ARG54581 anti-Thymidine Kinase antibody [3B3.E11]

Package: 100 μg Store at: -20°C

Summary

Product Description Mouse Monoclonal antibody [3B3.E11] recognizes Thymidine Kinase

Tested Reactivity Hu

Tested Application ELISA, WB

Specificity This antibody specifically recognizes human thymidine kinase.

Host Mouse

Clonality Monoclonal

Clone 3B3.E11

Isotype IgG1

Target Name Thymidine Kinase

Species Human

Immunogen 5'-His-tagged recombinanthuman thymidine kinase

Conjugation Un-conjugated

Alternate Names Thymidine kinase, cytosolic; TK2; EC 2.7.1.21

Application Instructions

Application Note Western blot: antibody at 10 ug/ml will recognize TK in 5, 10, or 20 ug lysates of cells that express TK.

ELISA: use antibody at 2 - 5 ug/ml (optimized for TK on solid phase at 10 ug/ml).

* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations

should be determined by the scientist.

Properties

Form Liquid

Purification Protein G-purified

Buffer PBS (pH 7.4)

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links <u>GeneID: 7083 Human</u>

Swiss-port # P04183 Human

Gene Symbol TK1

Gene Full Name thymidine kinase 1, soluble

Background Thymidine kinase (TK) belongs to agroup of enzymes such as dihydrofolatereductase, thymidylate

synthase, and DNA polymerase that are involved in DNA synthesis and precursor production. High levels of these enzymes are present in proliferating cells, and low levels are found in resting cells, due to multiple regulatory mechanisms that ensure exclusive expression of these enzymes in replicating cells. TK

is responsible forcatalyzing the phosphorylation ofthymidine, which functions as a part of the

pyrimidine salvage pathway involvedin DNA synthesis. The activities of enzymes such as TK are essential forthe activation of severalchemotherapeutically important nucleoside analogues that are administered

as prodrugs.

Research Area Gene Regulation antibody

Calculated Mw 25 kDa

PTM Phosphorylated on Ser-13 in mitosis.