

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TTK in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) CaM Kinase II, rhCaM Kinase IIα, rhCaM Kinase IIβ, rhCaM Kinase IIδ, rhCaM Kinase IIγ, rhCaM Kinase III, rhCaM Kinase IV, rhCaM Kinase
Source	Monoclonal Mouse IgG ₁ Clone # 689913
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human TTK Ser281-Leu481 Accession # P33981
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

TTK (Dual specificity Thr/Tyr kinase; also PYT and hMps1) is a 97-105 kDa member of the Ser/Thr protein kinase family of enzymes. It is expressed in testis and thymus, and participates in cell cycle regulation. In particular, it directs chromosome alignment, centrosome duplication, and spindle assembly checkpoint formation. Via phosphorylation, TTK is known to regulate p53, CDCA8 and TACC2. Human TTK is 857 amino acids (aa) in length. It contains one protein kinase domain (aa 525-791). Activation occurs following homodimerization and autophosphorylation on Thr675, Thr676 and Thr686. There are two potential splice variants. One shows an alternative start site at Met17, while another shows a deletion of Gln420. Over aa 281-481, human TTK shares 53% aa identity with mouse TTK.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.