

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 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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

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