

TK (Ab-13) Conjugated Antibody

Catalog No: #C33143



Package Size: #C33143-AF350 100ul #C33143-AF405 100ul #C33143-AF488 100ul

#C33143-AF555 100ul #C33143-AF594 100ul #C33143-AF647 100ul

#C33143-AF680 100ul #C33143-AF750 100ul #C33143-Biotin 100ul

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Description

Product Name	TK (Ab-13) Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of total TK protein
Immunogen Description	Synthesized non-phosphopeptide derived from human TK around the phosphorylation site of serine 13 (P-G-S(p)-P-S).
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	EC 2.7.1.21;KITH;TK-1;TK1;Thymidine kinase
Accession No.	Swiss-Prot#:P04183NCBI Gene ID:7083
Uniprot	P04183
GeneID	7083;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	25
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Product Description

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Background

Thymidine kinases play a critical role in generating the DNA synthetic precursor deoxythymidine triphosphate (dTTP) by catalyzing the phosphotransfer of phosphate from ATP to deoxythymidine (dT) and thymidine (T) in the cell. TK1 expression and activity is regulated in a cell cycle-dependent manner, accumulating during G1-phase to peak levels in S-phase before being degraded prior to cell division. Stability, but not activity, may be regulated via phosphorylation of TK1 at Ser13 by Cdc2 and/or Cdk2, but the precise mode of regulation remains elusive. These observations indicate that TK1 might be a useful marker of cell proliferation; however, recent studies have shown that TK1 plays a more significant role in the DNA damage response.

Note: This product is for in vitro research use only