

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CDK8 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) CDK2, rhCDK4, and CDK6 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human CDK8 Asn380-Tyr464 Accession # P49336
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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.

Immunohistochemistry 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

CDK8 (cyclin-dependent kinase 8; also K35) is a 53-55 kDa member of the CDC2/CDKX subfamily, CMGC Ser/Thr protein kinase family of enzymes. Together with cyclin C, MED12 and MED13, CDK8 forms a "CDK8 module" that contributes to the structure of a four module Mediator complex. CDK8 would appear to have multiple functions. It can block transcription, and the re-initiation of transcription; it can also promote the transcription of thyroid hormone target genes; and it appears to phosphorylate the ICD of Notch, promoting its degradation. Human CDK8 is 464 amino acids (aa) in length. It contains one protein kinase domain (aa 21-335) and two utilized phosphorylation sites at Thr410 and Ser413. There are two potential alternative start sites at Met174 and Met61. Over aa 380-464, human CDK8 shares 98% aa identity with mouse CDK8.

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