

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
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

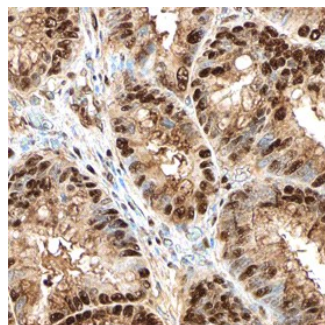
APPLICATIONS

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.

	Recommended Concentration	Sample
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry



CDK8 in Human Colon. CDK8 was detected in immersion fixed paraffin-embedded sections of human colon using Sheep Anti-Human CDK8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6809) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei of epithelial cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.