

Product datasheet for AP21018PU-M

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

CN: techsupport@origene.cn

OriGene Technologies, Inc.

Chk1 (CHEK1) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IHC

Recommended Dilution: Western Blot: 1/500 - 1/1000.

Immunohistochemistry: 1/50 - 1/200. Immunofluorescence: 1/50 - 1/200.

Reactivity: Human, Mouse, Rat

Host: Rabbit

Clonality: Polyclonal

Specificity: CHK1 pAb detects endogenous levels of CHK1 protein.

Formulation: Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.2.

State: Aff - Purified

State: Liquid purified Ig fraction

Concentration: 1,0 mg/ml

Purification: Affinity chromatography (> 95% (by SDS-PAGE)

Conjugation: Unconjugated

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Gene Name: checkpoint kinase 1

Database Link: Entrez Gene 12649 MouseEntrez Gene 140583 RatEntrez Gene 1111 Human

<u>014757</u>



Background:

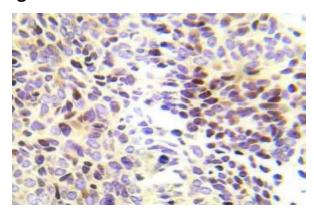
Cell cycle events are regulated by the sequential activation and deactivation of cyclin dependent kinases (Cdks) and by proteolysis of cyclins. Chk1 and Chk2 are involved in these processes as regulators of Cdks. Chk1 and Chk2 both function as essential components in the G2 DNA damage checkpoint by phosphorylating Cdc25C in response to DNA damage. Phosphorylation inhibits Cdc25C activity, thereby blocking mitosis. Cdc25A, Cdc25B and Cdc25C protein tyrosine phosphatases function as mitotic activators by dephosphorylating Cdc2 p34 on regulatory tyrosine residues. It has also been shown that Chk1 can phosphorylate Wee1 in vitro, providing evidence that the hyperphosphorylated form of Wee1, seen in cells delayed by Chk1 overexpression, is due to phosphorylation by Chk1.

Synonyms: CHEK1, CHEK-1

Protein Families: Druggable Genome, Protein Kinase, Stem cell - Pluripotency

Protein Pathways: Cell cycle, p53 signaling pathway

Product images:



Immunohistochemistry (IHC) analyzes of CHK1 pAb in paraffin-embedded human lung adenocarcinoma tissue.