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Product datasheet for AP20931PU-M

Chk2 (CHEK2) pThr387 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC
Recommended Dilution:	**Immunohistochemistry on Paraffin Sections**: 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic phosphopeptide derived from human Chk2 around the phosphorylation site of Threonine 387.
Specificity:	This antibody detects endogenous levels of p-CHK2 protein when phosphorylated at Thr387.
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE) Preservative: 0.05% Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography
Conjugation:	Unconjugated
Storage:	Store 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.
Predicted Protein Size:	~ 62 kDa
Gene Name:	checkpoint kinase 2
Database Link:	Entrez Gene 50883 MouseEntrez Gene 114212 RatEntrez Gene 11200 Human O96017

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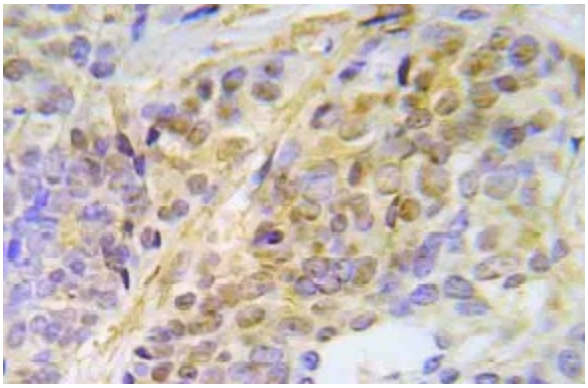
Background: Cell cycle events are regulated by the sequential activation and deactivation of cyclin dependent kinases (Cdks) and by proteolysis of cyclins. Chk1 and Chk2 are involved in these processes as regulators of Cdks. Chk1 and Chk2 both function as essential components in the G2 DNA damage checkpoint 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 Wee 1 in vitro, providing evidence that the hyperphosphorylated form of Wee 1, seen in cells delayed by Chk1 overexpression, is due to phosphorylation by Chk1. Chk1 is phosphorylated on Serine 345 (S345) in response to UV, IR and hydroxyurea (HU). Chk1 plays an essential role in the mammalian DNA damage checkpoint, embryonic development and tumor suppression.

Synonyms: CHEK2, CHEK-2, CHK-2, RAD53, Cds1

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

Protein Pathways: Cell cycle, p53 signaling pathway

Product images:



Immunohistochemistry (IHC) analyzes of p-CHK2 (pThr387) antibody in paraffin-embedded human lung adenocarcinoma tissue.