

**产品名称:** Phospho-Chk2 (Thr383) Rabbit Polyclonal Antibody

**产品货号:** APRab04458

### 产品概述 (Summary)

|                   |                                                                                                   |
|-------------------|---------------------------------------------------------------------------------------------------|
| 描述(Description)   | Rabbit polyclonal Antibody                                                                        |
| 宿主(Host)          | Rabbit                                                                                            |
| 应用(Application)   | WB,ICC/IF,ELISA                                                                                   |
| 种属反应(Reactivity)  | Human,Mouse,Rat,Monkey                                                                            |
| 偶联物(Conjugation)  | Unconjugated                                                                                      |
| 修饰(Modification)  | Phosphorylated                                                                                    |
| 同种型(Isotype)      | IgG                                                                                               |
| 克隆(Clonality)     | Polyclonal                                                                                        |
| 剂型(Form)          | Liquid                                                                                            |
| 保存条件(Storage)     | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.          |
| 储存溶液(Buffer)      | Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N. |
| 纯化 (Purification) | Affinity purification                                                                             |

### 产品应用(Application)

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| 稀释比(Dilution Ratio)   | WB 1:500-1:2000,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000 |
| 分子量(Molecular Weight) | 60kDa                                                     |

### 抗原信息(Antigen Information)

|                       |                                                                                                                                            |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 基因名(Gene Name)        | CHEK2                                                                                                                                      |
| 别名(Alternative Names) | CHEK2; CDS1; CHK2; RAD53; Serine/threonine-protein kinase Chk2; CHK2 checkpoint homolog; Cds1 homolog; Hucds1; hCds1; Checkpoint kinase 2  |
| 基因 ID(Gene ID)        | 11200.0                                                                                                                                    |
| SwissProt ID          | O96017                                                                                                                                     |
| 免疫原(Immunogen)        | The antiserum was produced against synthesized peptide derived from human Chk2 around the phosphorylation site of Thr383. AA range:356-405 |

### 研究背景 (Background)

In response to DNA damage and replication blocks, cell cycle progression is halted through the control of critical cell cycle

regulators. The protein encoded by this gene is a cell cycle checkpoint regulator and putative tumor suppressor. It contains a forkhead-associated protein interaction domain essential for activation in response to DNA damage and is rapidly phosphorylated in response to replication blocks and DNA damage. When activated, the encoded protein is known to inhibit CDC25C phosphatase, preventing entry into mitosis, and has been shown to stabilize the tumor suppressor protein p53, leading to cell cycle arrest in G1. In addition, this protein interacts with and phosphorylates BRCA1, allowing BRCA1 to restore survival after DNA damage. Mutations in this gene have been linked with Li-Fraumeni syndrome, a highly penetrant familial cancer phenotype usually associated with inherited mutational activity:  $ATP + \text{a protein} = ADP + \text{a phosphoprotein}$ , cofactor: Magnesium, disease: Defects in CHEK2 are associated with Li-Fraumeni syndrome 2 (LFS2) [MIM:609265]; a highly penetrant familial cancer phenotype usually associated with inherited mutations in p53/TP53, disease: Defects in CHEK2 are found in some patients with osteosarcoma (OSRC) [MIM:259500], disease: Defects in CHEK2 are found in some patients with prostate cancer (CaP) [MIM:176807], enzyme regulation: Rapidly phosphorylated on Thr-68 by MLTK in response to DNA damage and to replication block. Kinase activity is also up-regulated by autophosphorylation, function: Regulates cell cycle checkpoints and apoptosis in response to DNA damage, particularly to DNA double-strand breaks. Inhibits CDC25C phosphatase by phosphorylation on 'Ser-216', preventing the entry into mitosis. May also play a role in meiosis. Regulates the TP53 tumor suppressor through phosphorylation at 'Thr-18' and 'Ser-20', similarity: Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CHK2 subfamily, similarity: Contains 1 FHA domain, similarity: Contains 1 protein kinase domain, subcellular location: Isoform 10 is present throughout the cell, tissue specificity: High expression is found in testis, spleen, colon and peripheral blood leukocytes. Low expression is found in other tissues.,

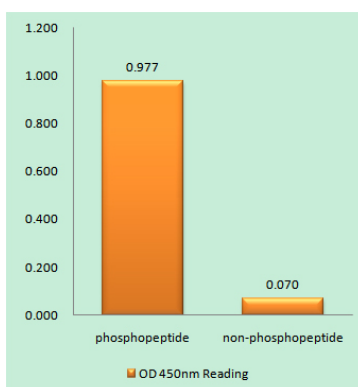
## 研究领域 (Research Area)

Cell\_Cycle\_G1S;Cell\_Cycle\_G2M\_DNA;p53;

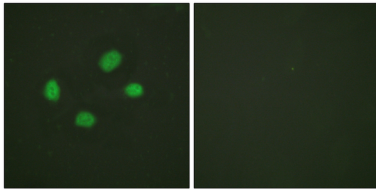
## 注意事项 (Note)

For research use only.

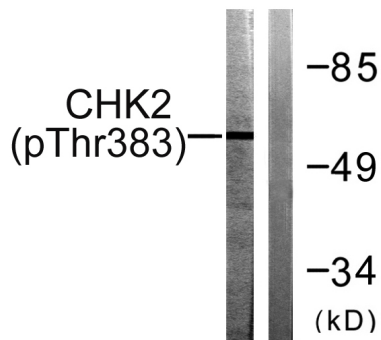
## 图片 (Image Data)



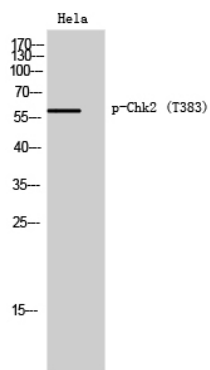
Enzyme-Linked Immunosorbent Assay ( Phospho-ELISA ) for Immunogen Phosphopeptide ( Phospho-left ) and Non-Phosphopeptide ( Phospho-right ) , using Chk2 ( Phospho-Thr383 ) Antibody



Immunofluorescence analysis of HeLa cells, using Chk2 ( Phospho-Thr383 ) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from COS7 cells treated with UV 30 ', using Chk2 ( Phospho-Thr383 ) Antibody. The lane on the right is blocked with the phospho peptide.



Western Blot analysis of HeLa cells using Phospho-Chk2 ( T383 ) Polyclonal Antibody diluted at 1 : 1000.

## EnkiLife 优势产品推荐

| 产品类别                        | 产品货号     | 产品名称                                               |
|-----------------------------|----------|----------------------------------------------------|
| WB 解决方案                     | RA10020  | 2h 极速 WB 即用型全流程试剂盒                                 |
|                             | RA10021  | 4h 快速 WB 即用型全流程试剂盒                                 |
|                             | RA10042  | 5h 畅享版 WB 全流程试剂盒                                   |
|                             | RA10037  | 校准级彩色预染蛋白 Marker (8-180kDa)                        |
|                             | RA10038  | 校准级彩色预染蛋白 Marker (10-250kDa)                       |
|                             | RA10039  | 校准级高分子彩色预染蛋白 Marker (25-400kDa)                    |
| TSA 多重荧光染色试剂盒               | RA10008  | TSA 双标三色多重荧光染色试剂盒 (mIHC)                           |
|                             | RA10009  | TSA 三标四色多重荧光染色试剂盒 (mIHC)                           |
|                             | RA10010  | TSA 四标五色多重荧光染色试剂盒 (mIHC)                           |
|                             | RA10011  | TSA 五标六色多重荧光染色试剂盒 (mIHC)                           |
|                             | RA10012  | TSA 六标七色多重荧光染色试剂盒 (mIHC)                           |
| IHC 检测试剂盒                   | RA10006  | HRP Anti-Mouse/Rabbit IHC Detection System         |
|                             | RA10007  | Polymer-HRP Anti-Mouse/Rabbit IHC Detection System |
| 抗体标记试剂盒                     | RE80004p | 辣根过氧化物酶(HRP)抗体标记试剂盒                                |
|                             | RE80002q | Sulfo-NHS-生物素标记试剂盒                                 |
|                             | RE80007p | Cy3 荧光素标记试剂盒                                       |
|                             | RE80011p | Fluor488 荧光素标记试剂盒                                  |
|                             | RE80017p | Fluor750 荧光素标记试剂盒                                  |
|                             | RE80005p | 藻红蛋白(R-PE) 抗体快速标记试剂盒                               |
|                             | RE80040  | PE-Cy7 串联染料抗体快速标记试剂盒                               |
| 稳转细胞系构建服务<br>(免费赠送全膜 WB 验证) | TS-0001  | 过表达稳转细胞系构建                                         |
|                             | TS-0002  | 敲低稳转细胞系构建                                          |
|                             | TS-0003  | 敲除细胞系构建                                            |

限于篇幅，更多产品详见官网：<https://www.enkilife.cn>