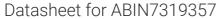
## antibodies .- online.com





## **CDK2 Protein (His tag)**



| ( ) | 1/0 | r\ /1 | 014 |   |
|-----|-----|-------|-----|---|
| ( ) | ve  | I V I | -v  | V |
|     |     |       |     |   |

Background:

| Quantity:                     | 50 μg  |
|-------------------------------|--|
| Target:                       | CDK2   |
| Origin:                       | Human  |
| Source:                       | Escherichia coli (E. coli)   |
| Protein Type:                 | Recombinant  |
| Purification tag / Conjugate: | This CDK2 protein is labelled with His tag.  |
| Product Details               |  |
| Purpose:                      | Recombinant Human CDK2 Protein (E.coli, His Tag)   |
| Sequence:                     | Met 1-Leu298   |
| Characteristics:              | Recombinant Human Cyclin-Dependent Kinase 2 is produced by our E.coli expression system and the target gene encoding Met1-Leu298 is expressed with a 6His tag at the N-terminus. |
| Purity:                       | > 90 % as determined by reducing SDS-PAGE.   |
| Endotoxin Level:              | < 1.0 EU per µg as determined by the LAL method.   |
| Target Details                |  |
| Target:                       | CDK2   |
| Alternative Name:             | CDK2 (CDK2 Products)   |

Background: Cyclin-dependent kinase 2 (CDK2) belongs to the cyclin-dependent kinase of

complex, whose activity is restricted to the G1-S phage of the cell cycle, it is essential for the

Ser/Thr protein kinase. CDK2 acts as a catalytic subunit of the cyclin dependent kinase

| G1/S transition. The kinase activity of CDK2 can be regulated by the association with a cyclin  |
|---|
| subunit, its phosphorylation state and CDK inhibitors. The activation of the CDK2/cyclin        |
| complex requires the phosphorylation of Thr160 and the dephosphorylation of Try14 and           |
| Tyr15. The inhibition of CDK2-cyclin complex can also be attributed to association with p27Kip1 |
| and p21Waf1/Cip1. The activation of CDK2 has been shown to be necessary for apoptosis of        |
| quiescent cells, such as neurons, thymocytes and endothelial cells.                             |
| Synonym: Cyclin-Dependent Kinase 2, Cell Division Protein Kinase 2, p33 Protein Kinase, CDK2,   |
| CDKN2   |

| Molecular Weight: | 36.1 kDa  |
|-------------------|---|
| NCBI Accession:   | NP_001789   |
| Pathways:         | PI3K-Akt Signaling, Cell Division Cycle, Mitotic G1-G1/S Phases, DNA Replication, M Phase, Synthesis of DNA |

## **Application Details**

|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

## Handling

| Format:          | Frozen, Liquid  |
|------------------|---|
| Buffer:          | Supplied as a 0.2 $\mu$ m filtered solution of 20 mM TrisHCl, 200 mM NaCl, 1 mM DTT, 40 % Glycerol, pH 8.0. |
| Storage:         | -20 °C  |
| Storage Comment: | Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.                                  |