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**Product Name: KD-Validated Phospho-CDC6 (Ser106) Recombinant Rabbit Monoclonal Antibody****Catalog #: KVA00745**

For research use only.

**Summary**

|                     |                                                                             |
|---------------------|-----------------------------------------------------------------------------|
| <b>Description</b>  | KO&KD-Validated antibody                                                    |
| <b>Host</b>         | Rabbit                                                                      |
| <b>Application</b>  | WB,FCM,ICC                                                                  |
| <b>Reactivity</b>   | Human                                                                       |
| <b>Conjugation</b>  | Unconjugated                                                                |
| <b>Modification</b> | Unmodified                                                                  |
| <b>Isotype</b>      | Rabbit IgG                                                                  |
| <b>Clonality</b>    | Rabbit mAb                                                                  |
| <b>Form</b>         | Liquid                                                                      |
| <b>Storage</b>      | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| <b>Shipping</b>     | Ice bags                                                                    |
| <b>Buffer</b>       | Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.   |
| <b>Purification</b> | Affinity purification                                                       |

**Application**

|                         |                                                         |
|-------------------------|---------------------------------------------------------|
| <b>Dilution Ratio</b>   | WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000 |
| <b>Molecular Weight</b> | Calculated MW: 62.7kDa                                  |

**Antigen Information**

|                          |                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>         | CDC6<br>CDC6; Cell Division Cycle 6; CDC18L; Cell Division Control Protein 6 Homolog; Cdc18-Related Protein; CDC6-Related Protein; P62(Cdc6); HsCDC6; CDC6 (Cell Division Cycle 6, S. Cerevisiae) Homolog; CDC6 Cell Division Cycle 6 Homolog (S. Cerevisiae); Cell Division Cycle 6 Homolog (S. Cerevisiae); CDC6 Cell Division Cycle 6 Homolog; Cell Division Cycle 6 Homolog; HsCDC18; HsCdc18; MGORS5 |
| <b>Alternative Names</b> |                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Gene ID</b>           | 990.0                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>SwissProt ID</b>      | Q99741                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Immunogen</b>         | A synthesized peptide derived from human Phospho-CDC6 (Ser106)                                                                                                                                                                                                                                                                                                                                            |

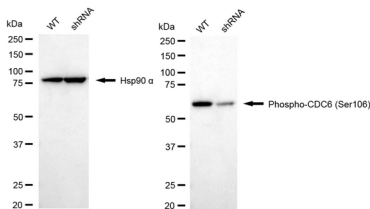
## Background

The protein encoded by this gene is highly similar to *Saccharomyces cerevisiae* Cdc6, a protein essential for the initiation of DNA replication. This protein functions as a regulator at the early steps of DNA replication. It localizes in cell nucleus during cell cycle G1, but translocates to the cytoplasm at the start of S phase. The subcellular translocation of this protein during cell cycle is regulated through its phosphorylation by Cdks. Transcription of this protein was reported to be regulated in response to mitogenic signals through transcriptional control mechanism involving E2F proteins. [provided by RefSeq, Jul 2008]

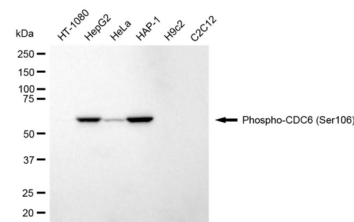
## Research Area

Epigenetics and Nuclear Signaling, Cell Biology

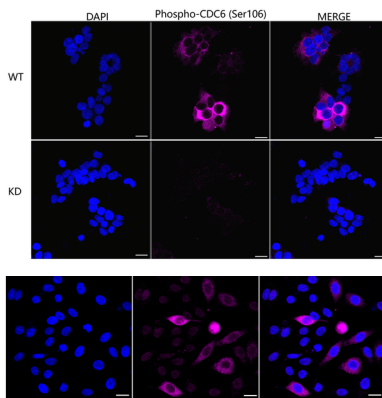
## Image Data



Western blotting analysis using phospho-CDC6 (Ser106) antibody (KVA00745). Phospho-CDC6 (Ser106) expression in wild type (WT) and CDC6 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with phospho-CDC6 (Ser106) antibody (KVA00745, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively. CDC6, cell division cycle 6.

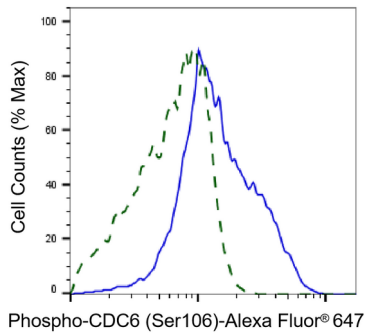


Western blotting analysis using phospho-CDC6 (Ser106) antibody (KVA00745). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with phospho-CDC6 (Ser106) antibody (KVA00745, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells using Phospho-CDC6 (Ser106) antibody (KVA00745, 1:1,000). Top panel: wild-type (WT); Bottom panel: Phospho-CDC6 (Ser106) shRNA knockdown (KD). Nuclei were stained blue with DAPI; Phospho-CDC6 (Ser106) was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm. Permeabilization: Triton.

Immunocytochemical staining of HepG2 cells with phospho-CDC6 (Ser106) antibody (KVA00745, 1:1,000). Nuclei were stained blue with DAPI; Phospho-CDC6 (Ser106) was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Validation of CDC6 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Phospho-CDC6 (Ser106) antibody (KVA00745, 1:2,000) and analyzed using BD flow cytometer.