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**Product Name: KD-Validated E2F Transcription Factor 1 Recombinant Rabbit Monoclonal Antibody****Catalog #: KVA01028**

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,Mouse,Rat                                                             |
| <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: 46.9kDa                                  |

**Antigen Information**

|                          |                                                                                                                                                                 |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>         | E2F1<br>E2F1; E2F Transcription Factor 1; RBBP3; RBP3; Retinoblastoma-Binding Protein 3 (E2F-Like);                                                             |
| <b>Alternative Names</b> | Retinoblastoma-Associated Protein 1; Retinoblastoma-Binding Protein 3; Transcription Factor E2F1; PRB-Binding Protein E2F-1; RBAP-1; RBBP-3; E2F-1; PBR3; RBAP1 |
| <b>Gene ID</b>           | 1869.0                                                                                                                                                          |
| <b>SwissProt ID</b>      | Q01094                                                                                                                                                          |
| <b>Immunogen</b>         | A synthesized peptide derived from human E2F1                                                                                                                   |

**Background**

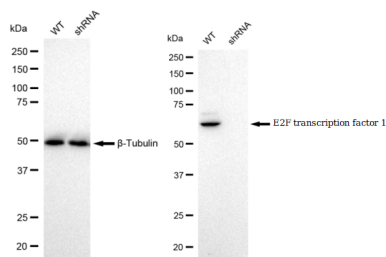
The protein encoded by this gene is a member of the E2F family of transcription factors. The E2F family plays a crucial role in the

control of cell cycle and action of tumor suppressor proteins and is also a target of the transforming proteins of small DNA tumor viruses. The E2F proteins contain several evolutionally conserved domains found in most members of the family. These domains include a DNA binding domain, a dimerization domain which determines interaction with the differentiation regulated transcription factor proteins (DP), a transactivation domain enriched in acidic amino acids, and a tumor suppressor protein association domain which is embedded within the transactivation domain. This protein and another 2 members, E2F2 and E2F3, have an additional cyclin binding domain. This protein binds preferentially to retinoblastoma protein pRB in a cell-cycle dependent manner. It can mediate both cell proliferation and p53-dependent/independent apoptosis. [provided by RefSeq, Jul 2008]

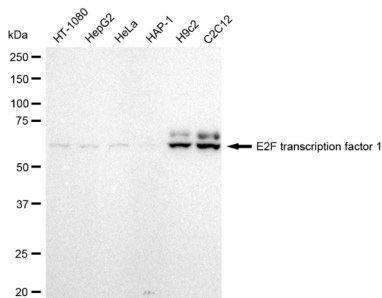
## Research Area

Epigenetics and Nuclear Signaling,Cancer

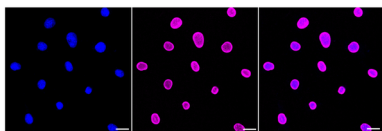
## Image Data



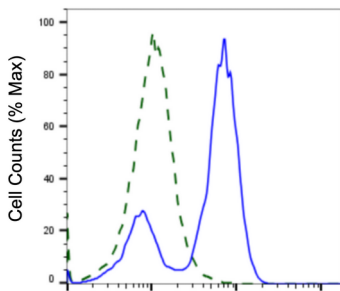
Western blotting analysis using E2F transcription factor 1 antibody (KVA01028). E2F transcription factor 1 expression in wild type (WT) and E2F transcription factor 1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with E2F transcription factor 1 antibody (KVA01028, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using E2F transcription factor 1 antibody (KVA01028). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with E2F transcription factor 1 antibody (KVA01028, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.

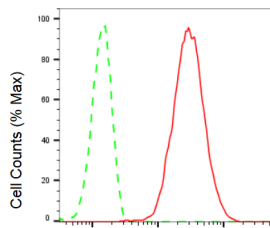


Immunocytochemical staining of C2C12 cells with E2F transcription factor 1 antibody (KVA01028, 1:1,000). Nuclei were stained blue with DAPI; E2F transcription factor 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar: 20 µm.



E2F Transcription Factor 1-Alexa Fluor® 647

Validation of E2F transcription factor 1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with E2F transcription factor 1 antibody (KVA01028, 1:2,000) and analyzed using BD flow cytometer.



E2F transcription factor 1-Alexa Fluor® 647

Flow cytometric analysis of E2F transcription factor 1 expression in C2C12 cells using E2F transcription factor 1 antibody (KVA01028, 1:2,000). Green, isotype control; red, E2F transcription factor 1.