

---

**Product Name: KD-Validated EFHD1 Mouse Monoclonal Antibody****Catalog #: KVA01160**

For research use only.

**Summary**

|                     |                                                                             |
|---------------------|-----------------------------------------------------------------------------|
| <b>Description</b>  | KO&KD-Validated antibody                                                    |
| <b>Host</b>         | Mouse                                                                       |
| <b>Application</b>  | WB,FCM                                                                      |
| <b>Reactivity</b>   | Human                                                                       |
| <b>Conjugation</b>  | Unconjugated                                                                |
| <b>Modification</b> | Unmodified                                                                  |
| <b>Isotype</b>      | Mouse IgG1                                                                  |
| <b>Clonality</b>    | Mouse 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 1:100-1:500; FC 1:100-1:1,000 |
| <b>Molecular Weight</b> | Calculated MW: 26.9kDa           |

**Antigen Information**

|                          |                                                                                                                                                                                                      |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>         | EFHD1                                                                                                                                                                                                |
| <b>Alternative Names</b> | EFHD1; EF-Hand Domain Family Member D1; Swiprosin-2; EF-Hand Domain-Containing Protein D1; EF-Hand Domain-Containing Protein 1; FLJ13612; SWS2; EF Hand Domain Containing 1; MSTP133; MST133; PP3051 |
| <b>Gene ID</b>           | 80303.0                                                                                                                                                                                              |
| <b>SwissProt ID</b>      | Q9BUP0                                                                                                                                                                                               |
| <b>Immunogen</b>         | Recombinant protein of human EFHD1                                                                                                                                                                   |

**Background**

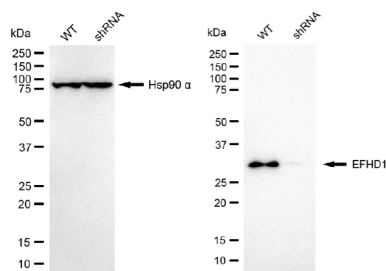
This gene encodes a member of the EF-hand super family of calcium binding proteins, which are involved in a variety of cellular processes including mitosis, synaptic transmission, and cytoskeletal rearrangement. The protein encoded by this gene is

composed of an N-terminal disordered region, proline-rich elements, two EF-hands, and a C-terminal coiled-coil domain. This protein has been shown to associate with the mitochondrial inner membrane, and in HeLa cells, acts as a novel mitochondrial calcium ion sensor for mitochondrial flash activation. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2016]

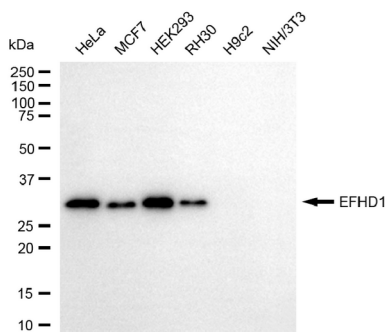
## Research Area

Cell Biology

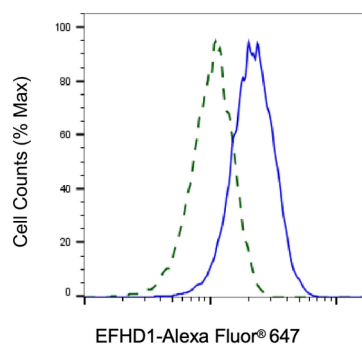
## Image Data



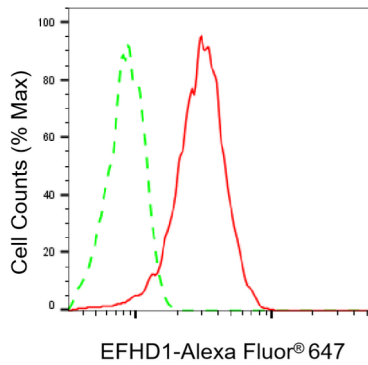
Western blotting analysis using EFHD1 antibody (KVA01160). EFHD1 expression in wild-type (WT) and EFHD1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with EFHD1 antibody (KVA01160, 1:500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Western blotting analysis using EFHD1 antibody (KVA01160). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with EFHD1 antibody (KVA01160, 1:500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Validation of EFHD1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with EFHD1 antibody (KVA01160, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of EFHD1 expression in HeLa cells using EFHD1 antibody (KVA01160, 1:1,000). Green, isotype control; red, EFHD1.