

# Anti-KHSRP Antibody Picoband™ (monoclonal, 4F10D2)

Catalog # ABO16575

## Product Information

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|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB, IF, ICC, FC                                                                                                                           |
| <b>Primary Accession</b> | <a href="#">Q92945</a>                                                                                                                    |
| <b>Host</b>              | Mouse                                                                                                                                     |
| <b>Isotype</b>           | Mouse IgG2b                                                                                                                               |
| <b>Reactivity</b>        | Human                                                                                                                                     |
| <b>Clonality</b>         | Monoclonal                                                                                                                                |
| <b>Format</b>            | Lyophilized                                                                                                                               |
| <b>Description</b>       | Anti-KHSRP Antibody Picoband™ (monoclonal, 4F10D2) . Tested in Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human. |
| <b>Reconstitution</b>    | Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.                                                                 |

## Additional Information

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| <b>Gene ID</b>             | 8570                                                                                                                                                                                              |
| <b>Other Names</b>         | Far upstream element-binding protein 2, FUSE-binding protein 2, KH type-splicing regulatory protein, KSRP, p75, KHSRP, FUBP2                                                                      |
| <b>Calculated MW</b>       | 73115                                                                                                                                                                                             |
| <b>Application Details</b> | Western blot, 0.25-0.5 µg/ml, Human<br>Immunocytochemistry/Immunofluorescence, 5 µg/ml, Human<br>Flow Cytometry, 1-3 µg/1x10 <sup>6</sup> cells, Human                                            |
| <b>Source</b>              | Eukaryota                                                                                                                                                                                         |
| <b>Contents</b>            | Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .                                                                                                      |
| <b>Clone Names</b>         | Clone: 4F10D2                                                                                                                                                                                     |
| <b>Immunogen</b>           | E.coli-derived human KHSRP recombinant protein (Position: D116-R478).                                                                                                                             |
| <b>Purification</b>        | Immunogen affinity purified.                                                                                                                                                                      |
| <b>Storage</b>             | At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing. |

## Protein Information

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|-------------|-------|
| <b>Name</b> | KHSRP |
|-------------|-------|

## Synonyms

FUBP2

## Function

Binds to the dendritic targeting element and may play a role in mRNA trafficking (By similarity). Part of a ternary complex that binds to the downstream control sequence (DCS) of the pre-mRNA. Mediates exon inclusion in transcripts that are subject to tissue- specific alternative splicing. May interact with single-stranded DNA from the far-upstream element (FUSE). May activate gene expression. Also involved in degradation of inherently unstable mRNAs that contain AU-rich elements (AREs) in their 3'-UTR, possibly by recruiting degradation machinery to ARE-containing mRNAs.

## Cellular Location

Nucleus. Cytoplasm. Note=A small proportion is also found in the cytoplasm of neuronal cell bodies and dendrites.

## Tissue Location

Detected in neural and non-neural cell lines.

## Background

Far upstream element-binding protein 2 is a protein that in humans is encoded by the KHSRP gene. The KHSRP gene encodes a multifunctional RNA-binding protein implicated in a variety of cellular processes, including transcription, alternative pre-mRNA splicing, and mRNA localization.

## Images

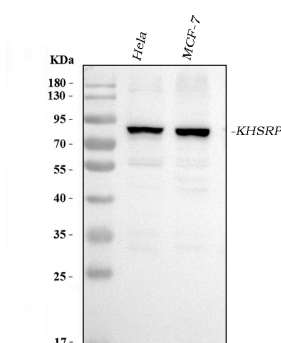


Figure 1. Western blot analysis of KHSRP using anti-KHSRP antibody (M02770-3).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HeLa whole cell lysates,

Lane 2: human MCF-7 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-KHSRP antigen affinity purified monoclonal antibody (Catalog # M02770-3) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for KHSRP at approximately 82 kDa. The expected band size for KHSRP is at 73 kDa.

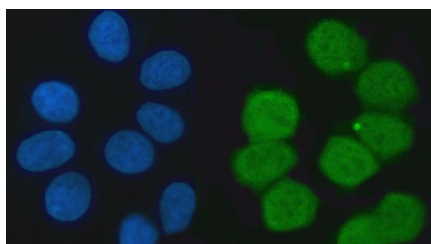


Figure 2. IF analysis of KHSRP using anti-KHSRP antibody (M02770-3).

KHSRP was detected in an immunocytochemical section of MCF-7 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 µg/mL mouse anti-KHSRP Antibody (M02770-3) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for

30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

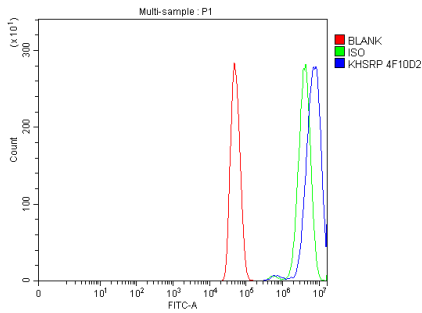


Figure 3. Flow Cytometry analysis of U251 cells using anti-KHSRP antibody (M02770-3). Overlay histogram showing U251 cells stained with M02770-3 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-KHSRP Antibody (M02770-3, 1  $\mu\text{g}/1 \times 10^6$  cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10  $\mu\text{g}/1 \times 10^6$  cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1  $\mu\text{g}/1 \times 10^6$ ) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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