Product datasheet

Anti-RRM2 antibody [1E1] ab57653

Overview

Product name: Anti-RRM2 antibody [1E1]
Description: Mouse monoclonal [1E1] to RRM2
Host species: Mouse
Tested applications: Suitable for: WB, IHC-P, ICC/IF, Flow Cyt
Species reactivity: Reacts with: Human
Immunogen: Recombinant fragment, corresponding to amino acids 1-111 of Human RRM2

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer: Preservative: None
PBS, pH 7.2
Purity: Protein G purified
Clonality: Monoclonal
Clone number: 1E1
Isotype: IgG1
Light chain type: kappa

Applications

Our Abpromise guarantee covers the use of ab57653 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td>⭐⭐⭐⭐☆</td>
<td>Use a concentration of 1 - 5 µg/ml. Predicted molecular weight: 45 kDa.</td>
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<tr>
<td>IHC-P</td>
<td></td>
<td>Use a concentration of 5 µg/ml.</td>
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### Target

**Function**
Provides the precursors necessary for DNA synthesis. Catalyzes the biosynthesis of deoxyribonucleotides from the corresponding ribonucleotides. Inhibits Wnt signaling.

**Pathway**
Genetic information processing; DNA replication.

**Sequence similarities**
Belongs to the ribonucleoside diphosphate reductase small chain family.

**Post-translational modifications**
Phosphorylation on Ser-20 relieves the inhibitory effect on Wnt signaling.

**Cellular localization**
Cytoplasm.

### Images

- **Western blot - Anti-RRM2 antibody [1E1] (ab57653)**
  
  Anti-RRM2 antibody [1E1] (ab57653) at 1 µg/ml + HepG2 (human liver hepatocellular carcinoma cell line) cell lysate

  **Predicted band size:** 45 kDa

- **Immunocytochemistry/Immunofluorescence - Anti-RRM2 antibody [1E1] (ab57653)**
  
  HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for RRM2 (green) using ab57653 at 10 µg/ml in ICC/IF.

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<td>ICC/IF</td>
<td></td>
<td>Use a concentration of 5 µg/ml.</td>
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<td>Flow Cyt</td>
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<td>Use 1 µg for 10^6 cells.</td>
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<td></td>
<td>ab170190</td>
<td>Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.</td>
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*Abreviews*
RRM2 antibody (ab57653) used in immunohistochemistry at 5µg/ml on formalin fixed and paraffin embedded human stomach.

RRM2 antibody (ab57653) at 1µg/lane + HeLa cell lysate at 25µg/lane.

ICC/IF image of ab57653 stained HepG2 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab57653, 10µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.
Overlay histogram showing HepG2 cells stained with ab57653 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab57653, 1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.

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