**PRODUCT SPECIFICATION**

**SSI-HYB 353-01 Anti Ro60**  
*Mouse monoclonal antibody*

<table>
<thead>
<tr>
<th>Article No.</th>
<th>96966</th>
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<tbody>
<tr>
<td><strong>Product Name</strong></td>
<td>SSI-HYB 353-01 Anti Ro60</td>
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<tr>
<td><strong>Clone</strong></td>
<td>SSI-34C4</td>
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<tr>
<td><strong>Subclass</strong></td>
<td>IgG1 / Kappa</td>
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<tr>
<td><strong>Presentation</strong></td>
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<tr>
<td>Preparation:</td>
<td>Protein-A purified</td>
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<tr>
<td>Content:</td>
<td>1 mg/mL, based on E(<em>{\text{IN}})=14.0 at A(</em>{280})</td>
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<tr>
<td>Solvent:</td>
<td>0.01 M PBS, pH 7.4, with 0.5 M NaCl</td>
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<tr>
<td>Storage:</td>
<td>-18 ºC or colder</td>
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**Antigen**  
Ro60 is a 60 kDa ring-shaped protein with two overlapping RNA binding sites.

In the cytoplasm, Ro60 assemble into a ribonucleoprotein complex also comprising the E3 ubiquitin ligase Ro52 and the Pol-III transcriptional terminator La/SSB and possibly also the RNA-binding Nucleolin and the chaperone Calreticulin (1-3). When associated in the complex, Ro60 binds non-covalently to non-coding RNAs called Y-RNAs at the binding site on the outer surface of the ring. The binding of Y RNAs to Ro60 inhibits binding of other RNAs to Ro60 and regulates the subcellular distribution of Ro60 possibly by masking a nuclear localization signal (4).

Unbound Ro60 translocate to and accumulates in the nucleus, where it joins the RNA quality control program. By binding small misfolded RNAs via its central cavity and by modulating RNA metabolism, Ro60 enhances cell survival during cellular stress such as ultraviolet radiation (4-5). A major function of Ro60 has been proposed to be protection against autoantibody development by sequestering defective ribonucleoproteins from immune surveillance (6).

Ro60 is also known as the SSA antigen associated with the autoimmune disorder; Sjögren's Syndrome and it is a major target of autoantibodies in patients suffering from the rheumatic diseases systemic lupus erythematosus, subacute cutaneous lupus erythematosus and neonatal lupus erythematosus.

**Immunogen**  
Purified bovine Ro60.

**Specificity**  
SSI-HYB 353-01 reacts with native Ro60.

**Epitope Specificity**  
SSI-HYB 353-01 recognizes a conformational epitope (7) with a different specificity compared to SSI-HYB 353-02, SSI-HYB 353-05 and SSI-HYB 353-06.

**Reactivity**  
SSI-HYB 353-01 reacts well in ELISA and is use full as both catching antibody and detection antibody. SSI-HYB 353-01 can be used as catching antibody in combination with conjugated SSI-HYB 353-02 or SSI-HYB 353-06 as detection antibody or either SSI-HYB 353-02 or SSI-HYB 353-06 can be used as catching antibody in combination with conjugated SSI-HYB 353-01 as detection antibody. SSI-HYB 353-01 also detects Ro-60 on line blot/dot blot.

**Culture Medium**  
Dulbecco's modified Eagle's medium with 10 % fetal calf serum.

**Fusion Partner**  
X63-Ag8 653.

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See next page

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SSI-HYB 353-01 Anti Ro60
Mouse monoclonal antibody

Immunization
Female NMRI mice were immunized i.p. with immunogen adsorbed onto Al(OH)₃.

Application
<table>
<thead>
<tr>
<th>Method</th>
<th>Usability</th>
</tr>
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<tbody>
<tr>
<td>ELISA</td>
<td>yes</td>
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<tr>
<td>Immunoblotting</td>
<td>yes</td>
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<tr>
<td>Immuno fluoresc.</td>
<td>No</td>
</tr>
<tr>
<td>Immunocytochemistry</td>
<td>No</td>
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References

Conditions
For research use only. Not for use in diagnostic procedures.
The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The animals from which this product was derived have not been exposed to or inoculated with any livestock or poultry disease agents exotic to the United States or Western Europe, and did not originate from facilities where work with exotic disease agents affecting livestock or avian species is carried out.