### Psr I

**Restriction Endonuclease**

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**E131**

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**Supplied in:**

- 10 mM Tris-HCl (pH 7.5)
- 50 mM KCl
- 0.1 mM EDTA
- 200 μg/ml BSA
- 7 mM 2-mercaptoethanol
- 50% glycerol

**Reaction Conditions:**

1×SEBuffer Y+BSA

Incubate at 30°C.

Warranty period for the enzyme storage at -20°C is one year from the date of the last assay indicated on the enzyme vial.

**Quality Control Assays**

**Ligation:** After 3-fold overdigestion with Psr I, ~70% of T7 DNA fragments can be ligated with T4 DNA Ligase and ~90% of these can be recut. In the presence of 10% PEG ligation is better.

**16-Hour Incubation:**

A 50 μl reaction containing 1μg of T7 DNA and 1 units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour.

No using BSA for long incubation.

High enzyme concentration may result in star activity.

**Oligonucleotide Assay:**

No detectable degradation of a single- and double-stranded oligonucleotide was observed after incubation with 1 units of enzyme for 3 hours.

**Incubation** at 37°C results in 20% activity.

**Enzyme Properties**

**Activity in SEBuffers:**

<table>
<thead>
<tr>
<th>Buffer</th>
<th>Activity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEBuffer B</td>
<td>10-25%</td>
</tr>
<tr>
<td>SEBuffer G</td>
<td>10-25%</td>
</tr>
<tr>
<td>SEBuffer O</td>
<td>0%</td>
</tr>
<tr>
<td>SEBuffer W</td>
<td>0-10%</td>
</tr>
<tr>
<td>SEBuffer ROSE</td>
<td>100%</td>
</tr>
</tbody>
</table>

When using a buffer other than the optimal (supplied) SEBuffer, it may be necessary to add more enzyme to achieve complete digestion.

**Heat Inactivation:**

Yes (65°C for 20 minutes)

**Reagents Supplied with Enzyme:**

10×SEBuffer Y, BSA (10 mg/ml)