INTENDED USE:
This product is intended for use in peroxidase-based immunohistochemical (IHC) staining procedures on cell preparations, frozen tissue sections, and paraffin-embedded tissue sections.

This product suppresses nonspecific staining due to endogenous peroxidase and pseudoperoxidase activity in peroxidase-based IHC staining procedures.

REAGENTS:
Ready-to-use Peroxidase Blocking Reagent is available in the following sizes:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1x15 mL</td>
<td>for manual staining. Sufficient for staining at least 50 tissue sections.</td>
</tr>
<tr>
<td>1x110 mL</td>
<td>for manual staining. Sufficient for staining at least 500 tissue sections.</td>
</tr>
<tr>
<td>10x11 mL</td>
<td>packaged for use with the DAKO Autostainer*. Sufficient for staining at least 500 tissue sections.</td>
</tr>
</tbody>
</table>

*DAKO Autostainer is available only in North America, South America, Australia and New Zealand.

DESCRIPTION:
Peroxidase Blocking Reagent: Peroxidase inhibitor containing hydrogen peroxide and 15 mM sodium azide.

PRECAUTIONS:
FOR LABORATORY USE.

REACTIVITY:
In immunoperoxidase procedures endogenous peroxidase and pseudoperoxidase activity within tissues is frequently observed. Tissue elements most commonly affected are hemoproteins such as hemoglobin in red blood cells, myoglobin in muscle cells, cytochrome in granulocytes, and monocytes as well as catalases in the liver and kidney. In the evaluation of specimens labelled in immunoperoxidase methods, the presence of endogenous enzyme can obscure the specific staining of the target antigen. In paraffin-embedded tissue sections, endogenous peroxidase activity can be suppressed by incubating specimens with 3% hydrogen peroxide prior to application of the primary antibody. However, this procedure cannot be applied to frozen tissue sections or cell preparations.
Endogenous peroxidase and pseudoperoxidase activity can be suppressed by a ratio of hydrogen peroxide and sodium azide without significantly compromising antigenic sites or tissue morphology. DAKO® Peroxidase Blocking Reagent containing hydrogen peroxide and sodium azide suppresses endogenous peroxidase and pseudoperoxidase activity in cell preparations, frozen tissue sections, and paraffin-embedded tissue sections.

**SPECIMENS:** Frozen tissue sections and cell preparations such as smears of peripheral blood, bone marrow, and other body fluids containing a large number of hematopoietic cells. For frozen tissue sections, fixation in acetone is recommended. For smears of blood and bone marrow, fixation in acetone/methanol is recommended. When specimens are fixed as recommended, this product will prevent the lysis of erythrocytes that may occur when using aminoethylcarbazole (AEC) chromogen on blood smears and bone marrow smears.

**PROCEDURE:** Specimens are incubated with the DAKO® Peroxidase Blocking Reagent for 5 to 10 minutes at room temperature and rinsed with a suitable wash buffer such as Tris buffer, PBS, or TBS (DAKO® TBS, Code No. S3001) before application of primary antibody.

**LIMITATIONS:** Hemoglobin present in red blood cells may be visible as reddish-brown pigments. These pigments may still be present after the use of DAKO® Peroxidase Blocking Reagent and should not be confused with endogenous peroxidase activity or specific peroxidase staining. For proper interpretation the use of an appropriate negative control is recommended.

Specimen staining is dependent on the handling and processing of the tissue prior to staining. Improper fixation, freezing, thawing, washing, drying, heating, or sectioning may produce artifacts, antibody trapping, or false-positive results. False-positive staining may also be caused by cross-reactivity of other IHC staining reagents to e.g. endogenous avidin-binding activity or nonspecific reaction with necrotic or degenerated cells.

**STORAGE:** Store at 2-8°C. Do not freeze.

**REFERENCES:**