WHY SCREEN FOR G6PD DEFICIENCY
G6PD deficiency is the most common of all clinically significant enzyme defects. Inherited as an X-linked recessive condition, G6PD deficiency prevents red blood cells from coping with oxidative stress effectively, and often leads to hemolysis and anemia in affected carriers. African, Mediterranean, Middle Eastern and South Asian males are the most affected, the incidence rate being in certain populations as high as 1:4.

In neonates, G6PD deficiency may cause build-up of unconjugated bilirubin and lead to kernicterus, the principal cause of mental retardation and death in neonates. An early diagnosis of G6PD deficiency minimizes the risk of hemolysis and helps affected children lead a normal, healthy life.

WHY GSP NEONATAL G6PD IS THE COST-EFFECTIVE CHOICE
The GSP Neonatal G6PD is the first fully automated G6PD assay on the market. It offers a highly reliable, fast and efficient way to screen G6PD deficiency with less risk of user errors and fewer reruns. The 14 days on-board stability also enables low sample volume runs without reagent loss and supports one calibration curve per 24 hours for higher throughput.

Even floating disks can be measured reliably with the GSP Neonatal G6PD. Thanks to a novel measurement protocol, you save time and money by not having to retest floating disks. This feature is not available in other G6PD assays. The GSP Neonatal G6PD kit is CE-marked according to the IVD Directive.

Key advantages:
- Fully automated G6PD assay
- Improved precision and performance due to automation
- Reliable sample results received even with floating disks
- On-board stability 14 days
- Higher throughput
The GSP Neonatal G6PD kit is intended for the quantitative determination of glucose-6-phosphate dehydrogenase (G6PD) activity using dried blood spot specimens as an aid in screening newborns for G6PD deficiency using the GSP instrument.

HOW GSP NEONATAL G6PD WORKS

The assay is based on the oxidation of glucose-6-phosphate by the G6PD enzyme present in the sample. At the same time NADP is reducted to a fluorescent NADPH, which is measured with excitation wavelength at 340 nm and emission at 460 nm.

\[
\begin{align*}
\text{G-6-P} & \rightarrow \text{6-PG} \\
\text{NADP}^+ & \rightarrow \text{NADPH}^+ \\
\text{G6PD} & \rightarrow \text{H}^+
\end{align*}
\]

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Product Description</th>
<th>Part Number</th>
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<tbody>
<tr>
<td>GSP Neonatal G6PD kit, Reagents for 12 plates</td>
<td>3310-0010</td>
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<tr>
<td>Clear microplates (in a bulk pack of 50)</td>
<td>4076-0010</td>
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