Y Chromosome Microdeletion
ARUP test code 2001778

Y CHROM Specimen
Whole Blood

Y Chromosome Result
Negative

Indication for testing: Male infertility.

Negative: None of the azoospermia factor (AZF) regions tested were found to be deleted from the Y chromosome. Azoospermia, oligospermia or male infertility related to other genetic causes has not been excluded (e.g., aneuploidy, chromosome rearrangements, or mutations within individual genes included in the AZF regions). Chromosome analysis should be considered to exclude 47,XXY (Kleinfelter syndrome) and other cytogenetic abnormalities which may result in non-obstructive azoospermia or oligospermia.

This result has been reviewed and approved by Hunter Best, Ph.D.

BACKGROUND INFORMATION: Y Chromosome Microdeletion

CHARACTERISTICS: Y chromosome microdeletions are typically characterized by azoospermia, severe to moderate oligospermia, or abnormal sperm morphology/motility in men with a normal physical evaluation. Assisted reproductive techniques are contraindicated for men carrying AZFa, AZFb, AZFc or AZFabc microdeletions, which are classically associated with spermatogenic failure.

PREVALENCE: 1 in 2,000 to 3,000 males carry Y chromosome deletions/microdeletions.

INHERITANCE: Y-linked; microdeletions are typically de novo.

CAUSE: Microdeletions of the Y chromosome azoospermia factor regions a, b or c (AZFa, AZFb or AZFc).

CLINICAL SENSITIVITY: Estimated at 5 to 10 percent for men with non-obstructive azoospermia or severe oligospermia.

METHODOLOGY: Multiplex polymerase chain reaction (PCR) followed by electrophoresis.

ANALYTICAL SENSITIVITY AND SPECIFICITY: Greater than 99 percent.

LIMITATIONS: Diagnostic errors can occur due to rare sequence variations. Mutations within individual genes included in the AZF regions will not be detected. Breakpoints of identified microdeletions will not be determined. Male infertility due to causes other than Y chromosome microdeletions tested, has not been excluded.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement C: aruplab.com/CS
### VERIFIED/REPORTED DATES

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Accession</th>
<th>Collected</th>
<th>Received</th>
<th>Verified/Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y Chromosome Result</td>
<td>19-065-104420</td>
<td>00/00/0000 00:00</td>
<td>00/00/0000 00:00</td>
<td>00/00/0000 00:00</td>
</tr>
</tbody>
</table>

END OF CHART