

Male infertility

# Devyser AZF v2 and Devyser AZF Extension

## Discover the advantages

- One reaction detects all markers needed for basic deletion screening
- One reaction detects all markers needed for extended characterisation
- Automatic identification of STS markers – no subjective data interpretation
- No toxic EtBr stained agarose gels required
- Cost-effective solution with less hands-on time required

## Detecting Y-chromosome microdeletions causing male infertility

Approximately 15% of couples attempting their first pregnancy are unsuccessful. Many contact infertility centers for diagnosis and treatment. In approximately 30% of cases, the cause is found in the man alone, and in a further 20%, both the man and woman are abnormal. Therefore, the male factor is at least partly responsible in about 50% of infertile couples.

Diagnosis of Y-chromosome microdeletions are among the most common genetic causes of male infertility. It has been shown that in men with otherwise unexplained spermatogenic failure (azoospermia or severe oligozoospermia), microdeletions in the AZFa, AZFb and AZFc (AZF: Azoospermia Factor) regions on the long arm of the human Y chromosome (Yq11) are frequently deleted. PCR analysis of the Y-chromosome is an important screening tool in the work-up of infertile males opting for assisted reproductive techniques.

## Diagnostic kits – a single PCR reaction for automatic identification

Diagnostic testing using the Devyser AZF v2 and Devyser AZF Extension kits relies on PCR amplification of sequence-tagged sites (STS) in the AZFa, AZFb and AZFc regions on the Y-chromosome. Successful amplification of an STS marker indicates presence, whereas absence of PCR amplification is indicative of deletion. All STS markers and control sequences as recommended by the European Academy of Andrology (EAA) and the European Quality Monitoring Network Group (EMQN) for basic and extended molecular diagnosis of Y-chromosomal microdeletions in the AZFa, AZFb and AZFc regions are included in the kit.

The use of fluorescently labelled primers for all markers allows automated visualization and identification of the STS markers using a Genetic Analyzer. This eliminates multiple PCR reactions, the use of toxic chemicals associated with EtBr stained agarose gels, and the guesswork associated with fragment identification on an agarose gel.

**Devyser. Results for life.**

*Devyser is specialized in the development, manufacture and sales of diagnostic kits for complex DNA testing within Oncology, Reproductive Health and Hereditary Diseases. The products are used to guide targeted cancer therapies, to enable rapid prenatal diagnostics as well as in a wide array of genetic tests. Devyser's product development focuses on simplifying and streamlining complex testing processes to improve throughput, reduce hands-on time and produce accurate and trusted results.*



## Technical specifications

### Intended use:

In vitro diagnostic product for molecular diagnosis of Y-chromosomal microdeletions in the AZFa, AZFb and AZFc regions.

### CE-labelled for IVD use

**Enables detection of all basic, extension and control markers as recommended by EAA and EMQN for molecular diagnosis of Y-chromosomal microdeletions**

### Detection format:

Capillary electrophoresis on Genetic Analyzer.

### Compatible Genetic Analysers:

Thermo Fisher's capillary electro-phoresis instruments: ABI 310, ABI 3130, ABI 3500, ABI 3730

### Reaction volume:

25 µL

### DNA input:

50 – 300 ng / PCR reaction

### Ready to use for PCR

### Kit size:

25 tests

### Article number:

- Devyser AZF v2: 8-A019.2
- Devyser AZF EXTension: 8-A020

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