

Client: Example Client ABC123 123 Test Drive Salt Lake City, UT 84108

UNITED STATES

Physician: Doctor, Example

**Patient: Patient, Example** 

DOB 2/22/1964 Gender: Female

**Patient Identifiers:** 01234567890ABCD, 012345

**Visit Number (FIN):** 01234567890ABCD **Collection Date:** 00/00/0000 00:00

## **TFE3 Gene Rearrangement by FISH**

ARUP test code 3002633

**Positive** TFE3 Result

Controls were run and performed as expected.

This result has been reviewed and approved by

TFE3 Ref Number **ABC** 123

**Total Cell Count** 100

Scoring Method Manual

**TFE3 Source** Tissue

H=High, L=Low, \*=Abnormal, C=Critical

4848



INTERPRETIVE INFORMTION: TFE3 Gene Rearrangements by FISH

Fluorescence in situ hybridization (FISH) analysis was performed on a section from a paraffin embedded tissue block using differentially labeled fluorescent probes targeting the upstream (5') and downstream (3') flanking regions of the TFE3 gene (ZytoVision GmbH). Cells were evaluated from regions of tumor identified on histopathologic review of a matching hematoxylin and eosin stained section. Controls performed appropriately.

This test is designed to detect translocations involving the TFE3 gene but does not identify a specific translocation partner. An abnormal signal pattern seen in 15 percent or more of the tumor cells evaluated is considered a positive result. While this test can detect most rearrangements it may not be able to detect rare cryptic rearrangements and intrachromosomal inversion events, such as a RBM10-TFE3 fusion. Based on the assay performance during test validation, the test is expected to detect 100 percent of TFE3 rearrangements in patients with TFE3 rearranged tumors, except for rare instances of cryptic rearrangements. Assay range and limit of detection were generated using normal and known positive cases respectively.

Identification of a rearrangement of the TFE3 gene locus is useful for the diagnosis of Alveolar Soft Part Sarcoma (ASPS) and Xp11 Translocation Renal Cell Carcinoma. TFE3 rearrangements are also identified in other neoplasms, including perivascular epithelioid cell tumors (PEComa) and epithelioid hemangioendotheliomas (EHE).

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

VERIFIED/REPORTED DATES				
Procedure	Accession	Collected	Received	Verified/Reported
TFE3 Result	24-054-100494	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
TFE3 Ref Number	24-054-100494	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Total Cell Count	24-054-100494	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Scoring Method	24-054-100494	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
TFE3 Source	24-054-100494	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00

**END OF CHART** 

H=High, L=Low, \*=Abnormal, C=Critical

Patient: Patient, Example ARUP Accession: 24-054-100494 Patient Identifiers: 01234567890ABCD, 012345 Visit Number (FIN): 01234567890ABCD Page 2 of 2 | Printed: 3/19/2024 3:54:01 PM