ARUP LABORATORIES
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Client: Example Client ABC123
123 Test Drive
Salt Lake City, UT 84108
UNITED STATES

Physician: Doctor, Example

Patient: Patient, Example

DOB	2/28/1969
Gender:	Female
Patient Identifiers:	01234567890ABCD, 012345
Visit Number (FIN):	01234567890ABCD
Collection Date:	00/00/0000 00:00

FUS (16p11) Gene Rearrangement by FISH

ARUP test code 3000548

FUS FISH Result	Negative This result has been reviewed and approved by [redacted] M.D. Controls performed as expected.
Total Cell Count	100
Scoring Method	Manual
FUS FISH Reference Number	SMP23-40360 A1
FUS FISH Source	L.Wrist BX

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

INTERPRETIVE INFORMATION: FUS (16p11) Gene Rearrangement 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 FUS gene (Abbott). 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 FUS gene, but it does not identify a specific partner gene. An abnormal signal pattern seen in 25 percent or more of the tumor cells evaluated is considered a positive result. Based on the assay performance during test validation, the test is expected to detect 100 percent of FUS rearrangements in patients with FUS 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 FUS gene locus is most useful for distinguishing myxoid liposarcoma/round cell liposarcoma and low-grade fibromyxoid sarcoma from other soft tissue tumors in their respective differential diagnoses. Rearrangements are less frequently encountered in a variety of other soft tissue neoplasms, and correlation with clinical and histopathologic findings is necessary for a complete diagnosis, therefore.

Reference:
Downs-Kelly E, Goldblum JR, Patel RM, et al. The utility of fluorescence in situ hybridization (FISH) in the diagnosis of myxoid soft tissue neoplasms. Am J Surg Pathol. 2008 Jan;32(1):8-13.

Fletcher DM, Bridge JA, Hogendoorn P, Mertens F, Eds. WHO Classification of Tumours of Soft Tissue and Bone, 4th Ed. Lyon: IARC, 2013.

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
FUS FISH Result	24-010-401116	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Total Cell Count	24-010-401116	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Scoring Method	24-010-401116	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
FUS FISH Reference Number	24-010-401116	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
FUS FISH Source	24-010-401116	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