

Client: Example Client ABC123 123 Test Drive

Salt Lake City, UT 84108

UNITED STATES

Physician: Doctor, Example

**Patient: Patient, Example** 

DOB 7/25/1956 Female Gender:

**Patient Identifiers:** 01234567890ABCD, 012345

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

**ROS1 by FISH** 

ARUP test code 3001308

Positive **ROS1 FISH Result** 

> Controls were run and performed as expected. This result has been reviewed and approved by

**Total Cell Count** 100

Scoring Method Manual

**ROS1 FISH Reference Number ABC** 123

**ROS1 FISH Source** Tissue

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

4848



## INTERPRETIVE INFORMATION: ROS1, 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 ROS1 gene (Agilent Technologies). 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 rearrangements involving the ROS1 gene, but it does not identify a specific partner gene. An abnormal signal pattern seen in 15 percent or more of the evaluated tumor cells is considered a positive result. Based on the assay performance during test validation, the test is expected to detect 100 percent of ROS1 rearrangements in patients with ROS1-rearranged carcinomas, except for rare instances of cryptic rearrangements. Assay range and limit of detection were generated using normal and known positive cases respectively.

ROS1 rearrangement occurs in approximately 1 percent of non-small cell lung carcinomas. Detection of a ROS1 rearrangement is useful for predicting tumor response to targeted therapy.

## Reference:

Takeuchi K et al. RET, ROS1 and ALK fusions in lung cancer. Nat Med. 18(3): 378-381, 2012.

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
ROS1 FISH Result	23-207-100906	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Total Cell Count	23-207-100906	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Scoring Method	23-207-100906	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
ROS1 FISH Reference Number	23-207-100906	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
ROS1 FISH Source	23-207-100906	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: 23-207-100906 Patient Identifiers: 01234567890ABCD, 012345 Visit Number (FIN): 01234567890ABCD Page 2 of 2 | Printed: 8/1/2023 3:09:37 PM

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