ARUP Laboratories
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*****Example Report*****

Patient Age/Gender: 38 years Female
Printed: 17-Dec-18 10:57:14

Procedure	Result	Units	Ref Interval	Accession	Collected	Received	Reported/ Verified
ROS1 by IHC Result	Equivocal f			18-347-900297	13-Dec-18 10:50:00	17-Dec-18 10:51:00	17-Dec-18 10:56:16
ROS1 Client Block ID	S18-123			18-347-900297	13-Dec-18 10:50:00	17-Dec-18 10:51:00	17-Dec-18 10:56:16
ROS1 FISH Result	Positive f			18-347-900297	13-Dec-18 10:50:00	17-Dec-18 10:51:00	17-Dec-18 10:56:44
ROS1 FISH Reference Number	S18-123			18-347-900297	13-Dec-18 10:50:00	17-Dec-18 10:51:00	17-Dec-18 10:56:44
ROS1 FISH Source	Tissue			18-347-900297	13-Dec-18 10:50:00	17-Dec-18 10:51:00	17-Dec-18 10:56:44
Total Cell Count	100			18-347-900297	13-Dec-18 10:50:00	17-Dec-18 10:51:00	17-Dec-18 10:56:44
Scoring Method	Manual			18-347-900297	13-Dec-18 10:50:00	17-Dec-18 10:51:00	17-Dec-18 10:56:44

13-Dec-18 10:50:00 ROS1 by IHC Result:

This result has been reviewed and approved by Joshua F. Coleman, M.D. Controls performed as expected.

13-Dec-18 10:50:00 ROS1 FISH Result:

This result has been reviewed and approved by Joshua F. Coleman, M.D. Controls performed as expected.

13-Dec-18 10:50:00 ROS1 by IHC Result:
INTERPRETIVE INFORMATION: ROS1 by IHC with FISH Confirmation

Test Information:

An absence of cytoplasmic or membranous staining is defined as negative for ROS1 by Immunohistochemistry. Positive staining demonstrates both membranous and cytoplasmic staining and may predict patient response to tyrosine kinase inhibitor therapy (Crizotinib). An equivocal result is defined by any degree of cytoplasmic staining only. Equivocal and positive results by immunohistochemistry will be confirmed by fluorescent in-situ hybridization (FISH).

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement B: aruplab.com/CS

13-Dec-18 10:50:00 ROS1 FISH Result:
METHODOLOGY AND INTERPRETIVE DATA:

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 (Abbott Molecular). 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.

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.

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