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

Physician: Doctor, Example

Patient: Patient, Example

DOB	12/31/2010
Gender:	Male
Patient Identifiers:	01234567890ABCD, 012345
Visit Number (FIN):	01234567890ABCD
Collection Date:	01/01/2017 12:34

MET Gene Amplification by FISH

ARUP test code 3001313

MET FISH Result	Amplified

This result has been reviewed and approved by Deepika Sirohi, M.D. Controls performed as expected.

INTERPRETIVE INFORMATION: MET Gene Amplification, FISH

Fluorescence in situ hybridization (FISH) analysis for MET gene amplification was performed on a section from a paraffin-embedded tissue block using differentially labeled fluorescent probes targeting the MET gene and the chromosome 7 centromere (CEP 7) (Abbott Molecular). Cells were evaluated from regions of tumor identified on histopathologic review of a matching hematoxylin- and eosin-stained section. Controls performed appropriately.

Based on the preclinical validation of this assay, MET gene amplification is defined as either a MET/CEP7 ratio of 2.0 or greater or an average MET gene copy number per cell of 6.0 or greater. Based on the assay performance during test validation, the test is expected to detect MET amplification status in 100 percent of patients. Assay range and limit of detection were generated using normal and known positive cases respectively.

MET gene amplification is observed in a variety of tumor types, including non-small cell lung carcinoma. High-level MET amplification (MET/CEP7 ratio greater than 5. See Ou et al. 2011) is considered an emerging biomarker for therapy with crizotinib in non-small cell lung carcinoma by the National Comprehensive Cancer Network (see NCCN Clinical Practice Guidelines in Oncology for Non-Small Cell Lung Carcinoma).

MET amplification may also be acquired as a therapy resistance alteration, eg, following anti-EGFR tyrosine kinase inhibition.

Reference:
Ou SH, Kwak EL, Siwak-Tapp C, et al. Activity of crizotinib (PF02341066), a dual mesenchymal-epithelial transition (MET) and anaplastic lymphoma kinase (ALK) inhibitor, in a non-small cell lung cancer patient with de novo MET amplification. J Thorac Oncol. 2011;6:942-6.

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

MET/CEP7 FISH Ratio	5.0

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

Average MET Signal Number per Cell	10.0
Average CEP7 Signal Number per Cell	2.0
MET FISH Reference Number	SP201234
MET FISH Source	Lung
Total Cell Count	50
Scoring Method	Manual

VERIFIED/REPORTED DATES

Procedure	Accession	Collected	Received	Verified/Reported
MET FISH Result	20-142-143454	5/21/2020 8:00:00 AM	8/17/2020 5:30:33 PM	8/17/2020 5:50:00 PM
MET/CEP7 FISH Ratio	20-142-143454	5/21/2020 8:00:00 AM	8/17/2020 5:30:33 PM	8/17/2020 5:50:00 PM
Average MET Signal Number per Cell	20-142-143454	5/21/2020 8:00:00 AM	8/17/2020 5:30:33 PM	8/17/2020 5:50:00 PM
Average CEP7 Signal Number per Cell	20-142-143454	5/21/2020 8:00:00 AM	8/17/2020 5:30:33 PM	8/17/2020 5:50:00 PM
MET FISH Reference Number	20-142-143454	5/21/2020 8:00:00 AM	8/17/2020 5:30:33 PM	8/17/2020 5:50:00 PM
MET FISH Source	20-142-143454	5/21/2020 8:00:00 AM	8/17/2020 5:30:33 PM	8/17/2020 5:50:00 PM
Total Cell Count	20-142-143454	5/21/2020 8:00:00 AM	8/17/2020 5:30:33 PM	8/17/2020 5:50:00 PM
Scoring Method	20-142-143454	5/21/2020 8:00:00 AM	8/17/2020 5:30:33 PM	8/17/2020 5:50:00 PM

END OF CHART

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