

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

Physician: Doctor, Example

**Patient: Patient, Example**

**DOB:** 8/18/2022  
**Gender:** Male  
**Patient Identifiers:** 01234567890ABCD, 012345  
**Visit Number (FIN):** 01234567890ABCD  
**Collection Date:** 00/00/0000 00:00

**MYCN (N-MYC) Gene Amplification by FISH**

ARUP test code 3001307

MYCN FISH Result	Amplified
	Controls were run and performed as expected. This result has been reviewed and approved by [REDACTED]

MYCN/CEP2 FISH Ratio	9.2
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Average MYCN Signal Number per Cell	20.0
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Average CEP2 Signal Number per Cell	2.2
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Total Cell Count	40
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Scoring Method	Manual
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MYCN FISH Reference Number	ROSS25-8904 A3
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MYCN FISH Source	Abdominal Mass
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**H=High, L=Low, \*=Abnormal, C=Critical**

Unless otherwise indicated, testing performed at:

INTERPRETIVE INFORMATION: MYCN (N-MYC), FISH

Fluorescence in situ hybridization (FISH) analysis for MYCN gene amplification was performed on a section from a paraffin embedded tissue block using differentially labeled fluorescent probes targeting the MYCN gene and the chromosome 2 centromere (CEP2) (Abbott Molecular). Cells were evaluated from regions of tumor identified on histopathologic review of a matching hematoxylin and eosin stained section. Controls performed appropriately.

MYCN amplification (MYCN/CEP2 ratio of 2.0 or greater) is considered a feature of high-risk disease and an indicator of poor prognosis in neuroblastoma. Amplification is also seen in SHH-activated and group 4 medulloblastomas with implications for prognosis and therapy response. Based on the assay performance during test validation, the test is expected to detect MYCN amplification status correctly in 100 percent of patients. Assay range and limit of detection were generated using normal and known positive cases respectively.

Reference:

Louis DN, Ohgaki H, Wiestler OD, Cavenee WK, Ellison DW, Figarella-Branger D, Perry A, Reifenberger G, von Deimling A, Eds. WHO Classification of Tumours of the Central Nervous System, Revised 4th Edition. Lyon, France: International Agency for Research on Cancer, 2016.

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
MYCN FISH Result	25-077-402624	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
MYCN/CEP2 FISH Ratio	25-077-402624	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Average MYCN Signal Number per Cell	25-077-402624	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Average CEP2 Signal Number per Cell	25-077-402624	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Total Cell Count	25-077-402624	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Scoring Method	25-077-402624	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
MYCN FISH Reference Number	25-077-402624	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
MYCN FISH Source	25-077-402624	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

Unless otherwise indicated, testing performed at: