MAYO CLINIC
Mayo Medical Laboratories

LABORATORY SERVICE REPORT

1-800-533-1710

PATIENT NAME	PATIENT NUMBER	AGE	SEX	ACCESSION #
TESTING, FMFC	L3MRNG9164346	74	F	G9164346

ORDERING PHYSICIAN	CLIENT ORDER #	ACCOUNT #
		LIAISONS

COLLECTION DATE TIME	RECEIVED DATE TIME	REPORT PRINTED DATE TIME	SPECIMEN INFORMATION
02/09/11 10:10 A	02/09/11 10:10 A	03/09/11 08:27 A	DATE OF BIRTH: 3/5/1936

Test Client
Attn: Mayo Liaisons
200 First Street SW
Rochester, MN 55905
507-284-8202

TEST REQUESTED	HI LO	REF RANGE	PERFORM SITE *

Myeloma, FISH, Fixed Cells — **REPORTED: 02/09/11 10:17 A**

Specimen	**Bone Marrow**	**MCR**
Specimen ID	**1053468**	**MCR**
Source	**Fixed cells**	**MCR**
Order Date	**09 Feb 2011 10:11**	**MCR**
Reason For Referral	**myeloma**	**MCR**

Method — **MCR**

```
FISH probes and locus for interphase FISH
-------------------------------------------------------
3cen (D3Z1), 7cen (D7Z1)
9cen (D9Z1), 15cen (D15Z4)
11q13 (CCND1-XT), 14q32 (IGH-XT)
13q14 (RB1), 13q34 (LAMP1)
14q32 (5'IGH,3'IGH)
17p13.1 (p53), 17cen (D17Z1)
4p16.3 (FGFR3), 14q32 (IGH)
14q32 (IGH), 16q23 (c-MAF)
```

Result — **MCR**

```
Results of 200 cells for 3, 7, 9, 15, IGH, -13 and 17p-;500
cells for CCND1/IGH, fusion.
Anomaly            Result     95% normal cutoff
-------------------------------------------------------
+3                 normal            <8.0
+7                 normal            <4.0
+9                 normal            <4.5
+15                normal            <4.5
+11(CCND1-XTx3)    normal            <1.6
13q-               normal            <6.5
-13              abnormal            <5.5
17p-               normal            <8.5
-17                normal            <6.5
```

** Perform Site Legend on last page of report*

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TESTING, FMFC	Final	02/09/11 10:10 A

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t(11;14)	normal	<0.6		
5'IGH3'IGH	abnormal	<7.0		
t(4;14)	normal	<0.6		
t(14;16)	abnormal	<0.6		
Tetraploid	abnormal	<10.0		

NOMENCLATURE:
nuc ish(Rb1,LAMP1)x1/(IGHx2),(c-MAFx3),(IGH con c-MAFx1)/(D3Z1,FGFR3,D7Z1,D9Z1,CCND1-XT,D15Z4,p53, D17Z1)x4/(Rb1,LAMP1)x2/(IGHx4),(c-MAFx6),(IGH con c-MAFx2)

Interpretation MCR

The result is abnormal and indicates monosomy 13 and IGH/c-MAF fusion, t(14;16). In addition, a tetraploid sub clone was observed in approximately 20% of nuclei. At diagnosis, these abnormalities are associated with an unfavorable prognosis in multiple myeloma. The prognostic significance for these abnormalities in MGUS, amyloidosis, or smoldering multiple myeloma is unknown. Fonseca et al., Blood 101:4569-4575, 2003.

DISCLAIMER: This test was developed and its performance characteristics determined by Laboratory Medicine and Pathology, Mayo Clinic. It has not been cleared or approved by the U.S. Food and Drug Administration. This FISH test does not rule out other chromosome abnormalities.

Reviewed By Heather Lynn Owen MCR
Release Date 09 Feb 2011 10:14 MCR

* PERFORMING SITE

MCR	Mayo Clinic Dpt of Lab Med & Pathology 200 First Street SW Rochester, MN 55905	Lab Director: Franklin R. Cockerill, III, M.D.

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TESTING, FMFC	Final	02/09/11 10:10 A