

## Interpreting the NUC ISH

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nuc ish: Nucleic Acid in situ hybridization, a technique used with ISH to detect specific DNA sequences within the nucleus of cells.

**The probe** for the chromosome being tested: Chromosome 12 and 17

nuc ish (D12Z3,MDM2)X2 [100],(TP53X1,D17Z1X2)[44/100]

**The gene** being evaluated: MDM2 is on Chromosome 12 & TP 53 gene is on the short arm (p) of Chromosome 17

**The number of copies** of the chromosome/gene:

- The normal finding would be 2 copies of a gene, one from each parent.
- There are 2 copies of MDM2, this is normal X2
- There is 1 copy of TP53, this means one is missing. X1 (as there is a X2 for Chromosome 17, this means that only the section with the TP53 was lost (or the short arm p))

**The number of interphases** with the aberration/the number of interphases total.

- The first number in the brackets [ ] indicates how many cells had the aberration. [44/100]
- The second number in the brackets [ ] indicates how many cells were evaluated. [44/100]
- If it lists only 100, that means that all the cells that were evaluated were normal. [100]