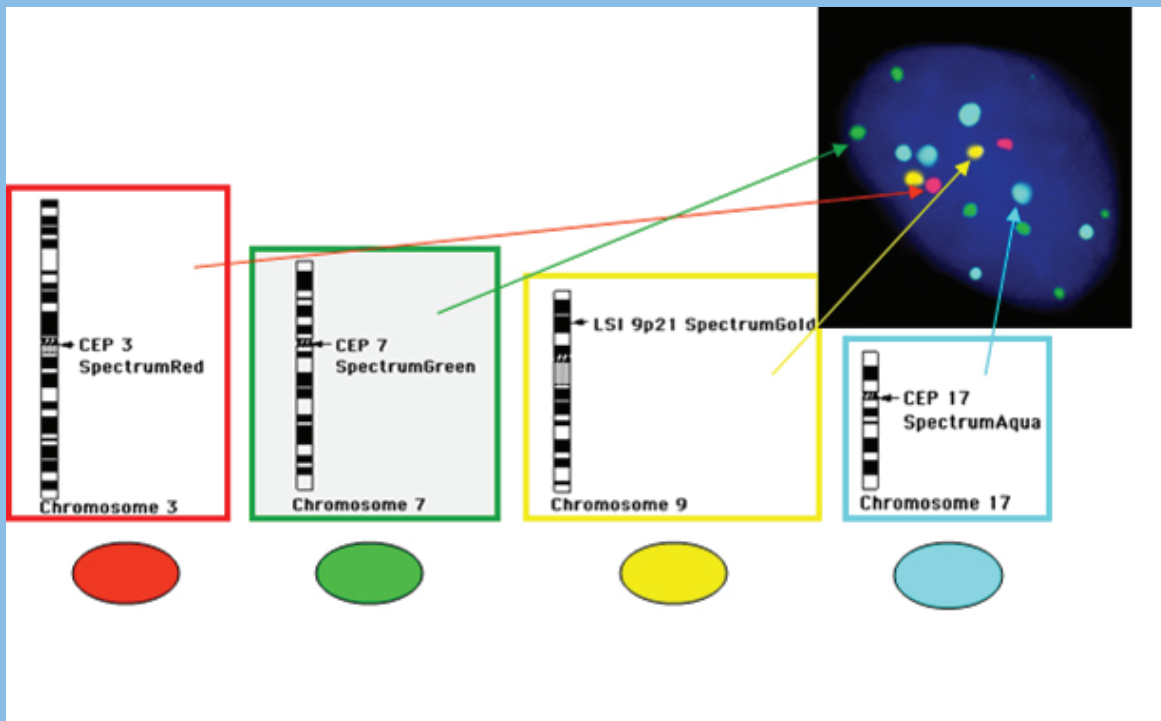


FISH for Detection of Bladder Cancer Detection in Urine Specimen



- A mixture of CEP3, CEP7, CEP17 and LSI9p21 probes, each labeled with a different fluorochrome, is used to analyze DNA within cells and to enumerate chromosomes 3, 7, 17, and detect the 9p21 locus deletion.
- A positive result is consistent with a diagnosis of bladder cancer or bladder cancer recurrence, either in the bladder or in another site within the urinary system.
- A negative result is suggestive of the absence of bladder cancer but does not rule it out.

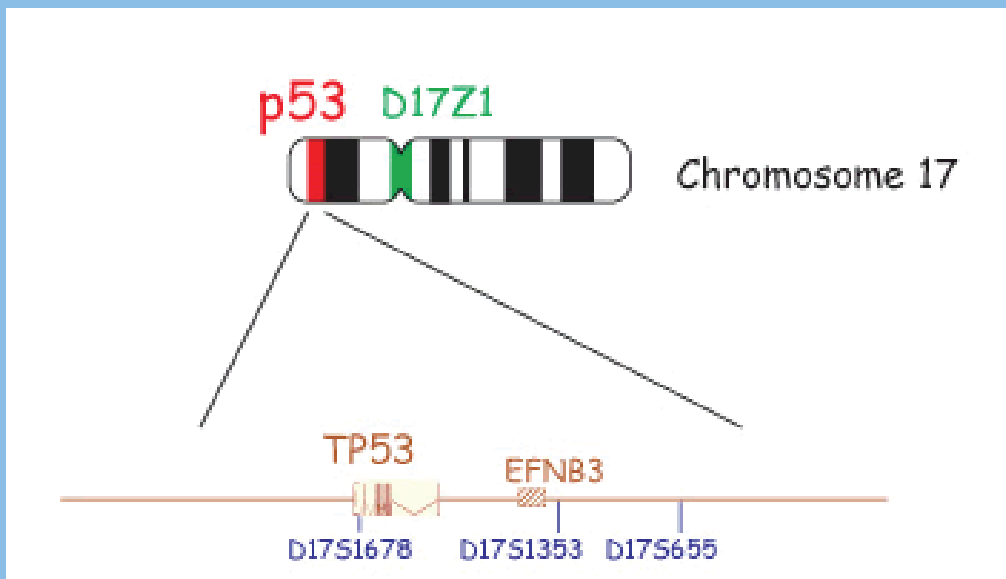
URO-GEN DX™

Examines three major mechanisms of carcinogenesis in bladder cancer:

- PTEN: Loss of tumor suppressor gene
- P53: Loss of tumor suppressor gene
- FGFR3: Gene deletion/translocation

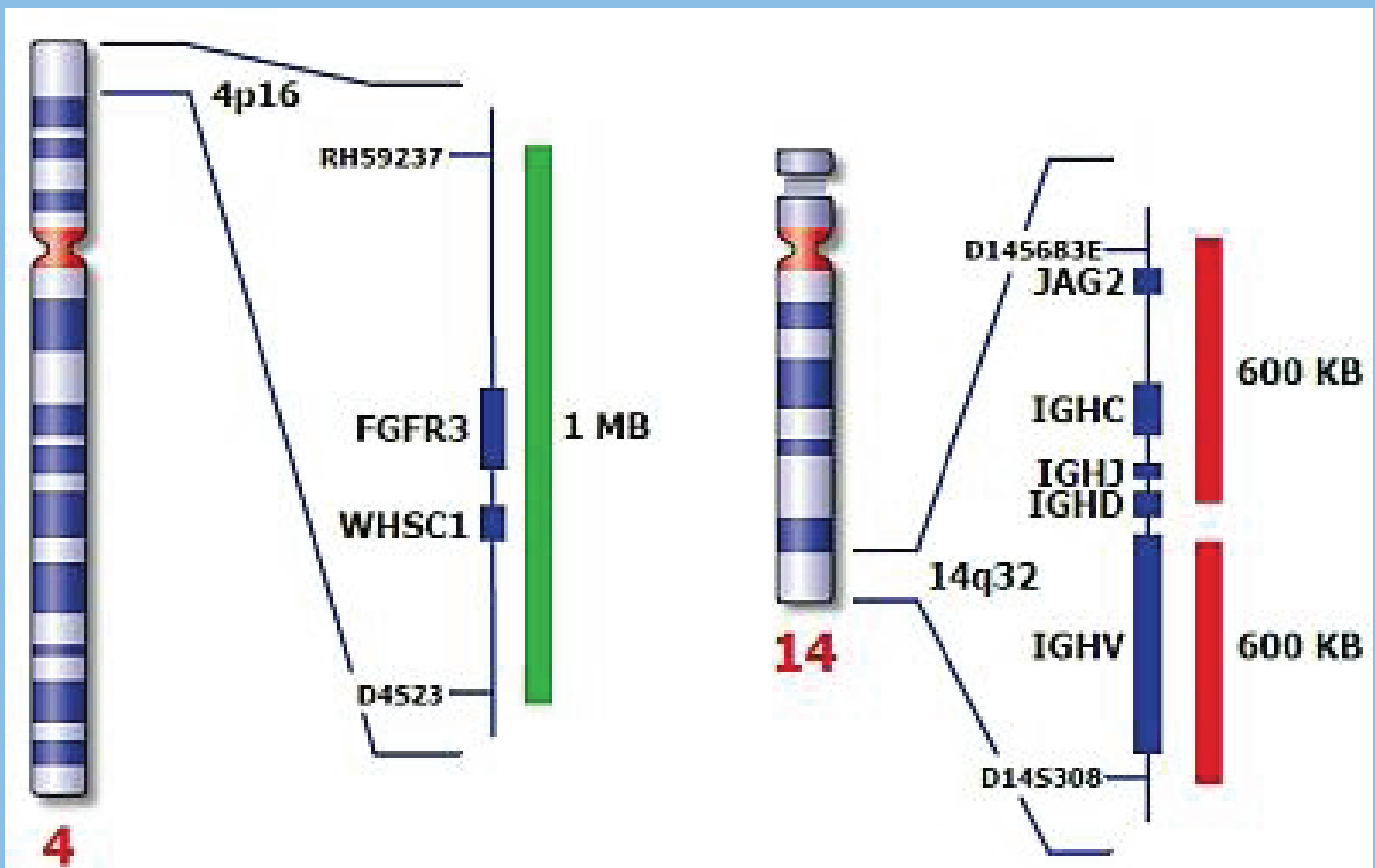
p53

- The p53 gene is tumor suppressor gene found on chromosome 17 and its product, the p53 protein, is responsible for the death of DNA damaged cells.
- Cells lacking p53 fail to undergo apoptosis (cell death) in response to agents that damage DNA, including radiation and many of the drugs used in cancer chemotherapy.



FGFR3

- FGFR3 is an epithelial growth factor found in Chromosome 4p16.3. Its presence, absence, or mutation has prognostic implications in tumor behavior. FGFR3 is translocated from the cytoplasm to the nucleus.
- Non-muscle invasive bladder cancers (NMI-BCs) represent 75% of bladder cancers upon presentation.



BLADDER TUMOR PROFILE

- This test is performed on select exons for the genes listed unless another method is noted: BIRC5, CDC25B, COL4A1, FABP4, KPNA2, MBNL2, MSN, COL18A1, COLA3BP, NEK1, SKAP2, UBE2C.