

Fluorescence in-situ Hybridization (FISH)

EGFR oncogene amplification

Specimen :
Block No. :
Clinical Indication :
Result :
:

Cells Counted	30
Total EGFR gene	
Total CEP-7	
EGFR gene mean per cell	
CEP 7 mean per cell	
EGFR:CEP-7 ratio	

Cut off for normal individual is > 2.0

PHOTO

Method: FISH (Fluorescence in situ hybridization) on formalin fixed paraffin embedded tumor tissue.

Probe: LSI EGFR (7p12)Spectrum Orange/CEP 7(7p11.1-q11.1) Spectrum Green.

Comments: Amplification or overexpression of EGFR has been implicated in the development of many solid tumors, including Non - small cell lung cancer (NSCLC). The EGFR gene codes a transmembrane glycoprotein with tyrosine kinase activity, which presumably plays a key role in controlling cell proliferation. Inhibition of EGFR by agents that block the tyrosin kinase domain of EGFR has been demonstrated to reduce proliferation of lung cancer cells, resulting in suppression of tumor growth.