

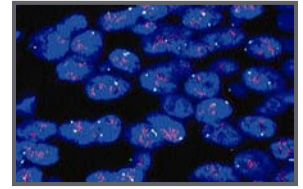
Oncotech Pathology Services

FISH

Test Code: 200 series

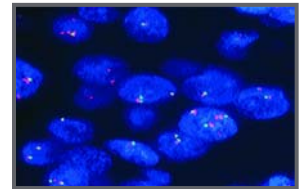
Turnaround time: 3-5 days

Oncotech offers Fluorescence *In Situ* Hybridization (FISH) for detection of Human Epidermal growth Factor Receptor-2 (HER2/neu) gene amplification in formalin-fixed, paraffin-embedded human breast cancer tissue specimens. The HER2/neu proto-oncogene is amplified in 25-30% of human primary breast cancers. This gene amplification indicates an increase in cell transcription, expression, growth and proliferation. The FISH HER2/neu test at Oncotech, using the PathVysion Kit by Vysis, can be utilized as a prognostic and predictive indicator of therapeutic outcome. Breast cancer patients whose tumors show HER2/neu gene amplification may benefit from Herceptin® (trastuzumab) therapy.



HER2/neu positive Breast Carcinoma

Oncotech offers Fluorescence *In Situ* Hybridization (FISH) for detection of Epidermal Growth Factor Receptor (EGFR) gene copy number in formalin-fixed, paraffin-embedded human non-small cell lung cancer tissue specimens. High EGFR gene copy number is associated with more aggressive disease. Non-small cell lung cancer patients whose tumors show high EGFR gene copy may benefit from tyrosine kinase inhibitor therapy such as Tarceva® (erlotinib). Oncotech FISH results are detailed, simple to understand, and include a clear picture for visualization of the affected cells.



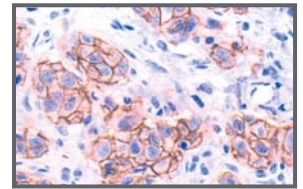
EGFR positive Non-Small Cell Lung Carcinoma

Diagnostic Consultation

Test Code: 190

Turnaround time: 2-3 days

Oncotech's consultation services provide a primary or confirmatory diagnosis from slides, blocks, fresh tissue, peripheral blood, bone marrow, effusions and aspirates, including fine needle aspiration. Our pathology team follows an integrated approach in the diagnosis of lymphoma and leukemia by combining morphologic diagnoses with relevant immunophenotypic and molecular studies for the most accurate evaluation of the individual patient's malignancy. Morphologic impressions from our referring pathologists are supplemented with immunophenotyping on hematopoietic malignancies. This allows the pathologist to evaluate the case by using specially designed algorithms appropriate for the tumor type.



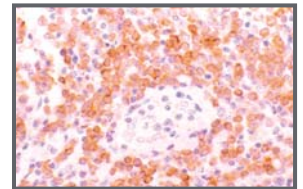
Breast carcinoma tissue stained with HER2/neu

Immunohistochemistry

Test Code: 800 series

Turnaround time: 2-3 days

Oncotech offers a range of diagnostic antibodies by IHC. Our pathologists use customized panels of primary antibodies to generate an antigenic profile that can be used in a final interpretation. Additionally, Oncotech offers a library of cytokeratins to assist in determining primary site of origin for those orphan tumors for which parentage must be determined. Once the antigenic profile of a malignancy has been established, the pathologist utilizes an algorithm for the differential diagnosis. These algorithms allow the pathologist to distinguish among histologically similar neoplasms. Our IHC laboratory follows stringent quality control measures to ensure accuracy and reproducibility of IHC results.



Follicular Lymphoma stained with bcl2 Mab

Oncotech offers automated quantification of IHC staining for ER, PR, HER2, Ki-67, and p53 biomarkers on all breast cancer cases only.

Immunophenotyping

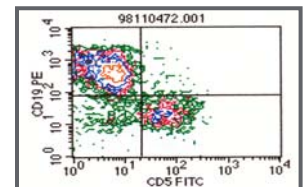
Test Code: 400 & 700 series

Turnaround time: 1 - 2 days

Oncotech offers a range of antibodies tested by flow cytometry. Immunophenotyping of the patient's hematologic malignancy allows the pathologist to accurately identify markers present on the neoplastic cells. Once the markers have been identified, a diagnostic algorithm is used to determine a probable diagnosis. Oncotech also offers the following profile studies:

Lymphoma Diagnostic Profile: Flow cytometric-based identification and classification of malignancies when morphologic or clinical findings indicate a lymphocytic origin of atypical cells. This analysis may differentiate between reactive and neoplastic processes in lymph nodes.

Leukemia Diagnostic Profile: Flow cytometric-based identification and classification of acute leukemias. This analysis may differentiate between myeloid or lymphoid neoplastic processes in bone marrow and peripheral blood.



Flow cytometer generated scatter plot