Fluorescent in situ Hybridization (FISH) of the Fhit Gene in Idiopathic Pulmonary Fibrosis (IPF) Lesions

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Results of FISH of the *FHIT* (fragile histidine triad) gene in IPF lesions using formalin-fixed, paraffin-embedded tissue sections. The human *FHIT* gene was identified at 3p14.2, which included the FRA3B fragile site, and was found to be abnormal in various cancers. Green signals: *FHIT*-specific probe spanning exon 5; red signals: chromosome 3 centromere probe. Allelic loss of the *FHIT* gene (one blue signal and two red signals in a nucleus) is seen in ciliated metaplasias (A) and non-ciliated metaplasias (B) of IPF. The *FHIT* gene may be one of the possible targets for prevention or therapy in lung cancer with IPF.