

## Photogravure

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

Kazutsugu Uematsu, Akinobu Yoshimura, Akihiko Gemma, Yoko Hosoya and Shoji Kudoh  
The Fourth Department of Internal Medicine, Nippon Medical School

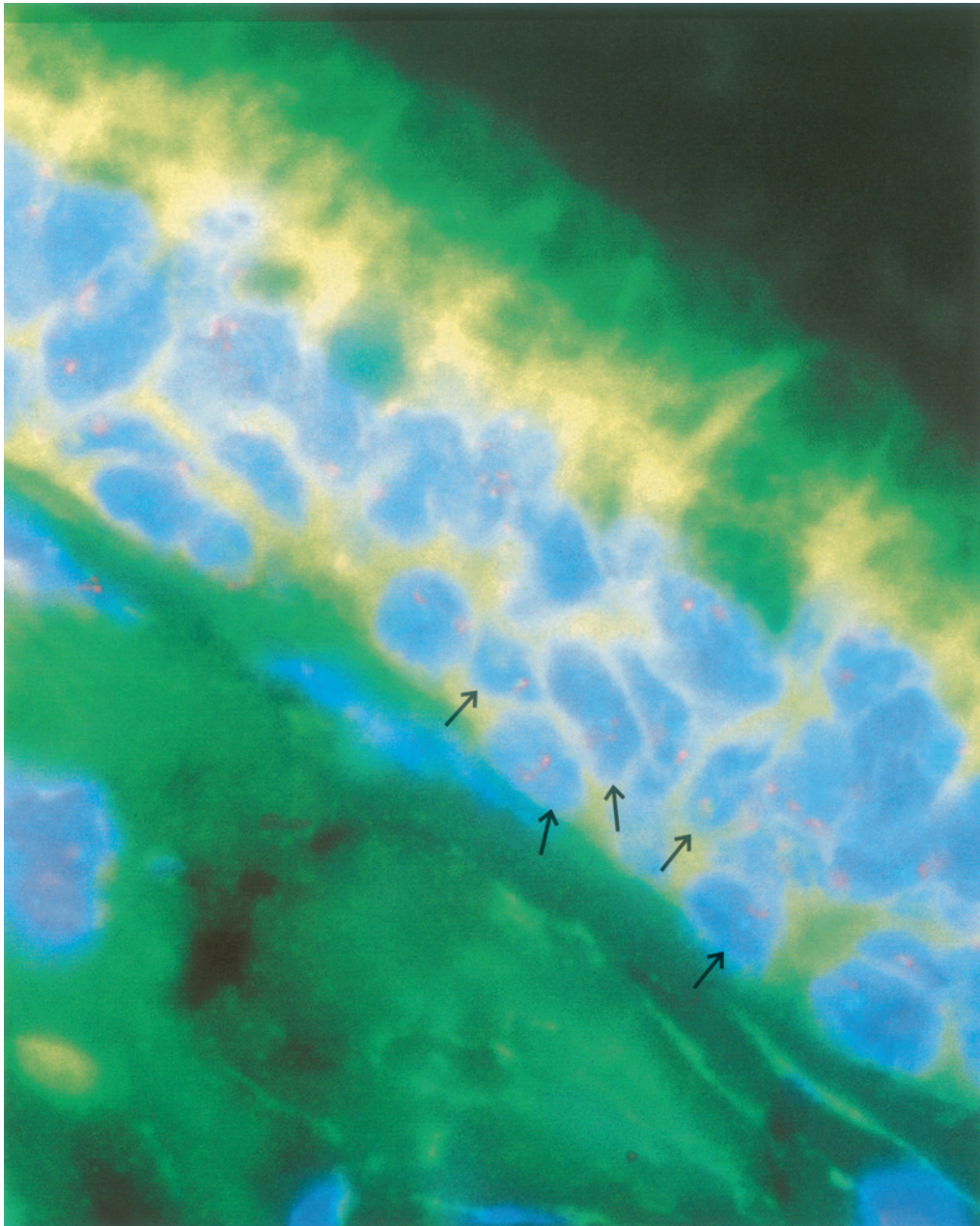


Photo. 1

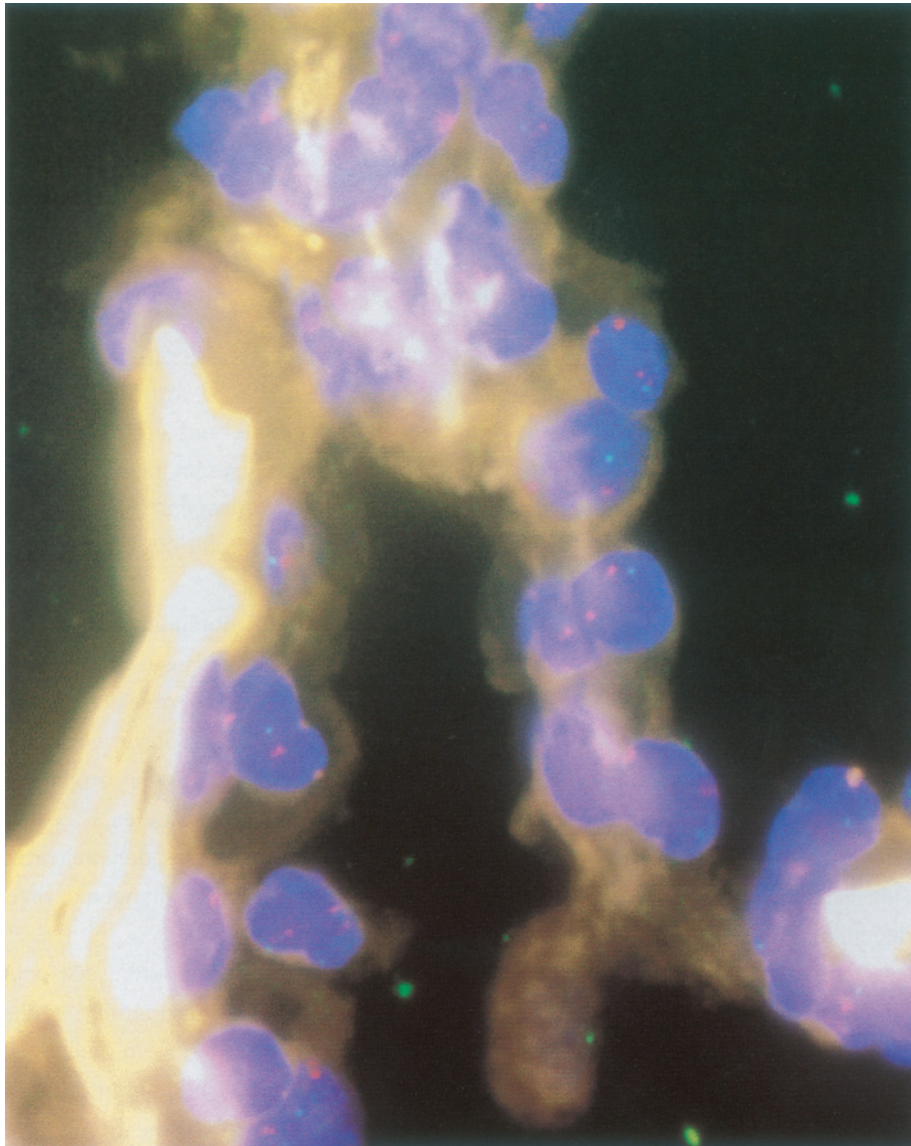


Photo. 2

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.