

Figure S1 Kendall's correlation coefficient between laboratories.



Figure S2 Overall percentage agreement for all enrolled cases. (A) Four groups (0, 1+, 2+, vs. 3+), (B) three groups [0, low (1+ and 2+) vs. 3+], (C) two groups [not 3+ (0, 1+, and 2+) vs. 3+], (D) two groups [0 vs. not 0 (1+, 2+, and 3+)], (E) two groups [low (1+ and 2+) vs. not low (0 and 3+)], (F) cases scored as IHC-0 by at least one laboratory, (G) cases scored as IHC-1+ by at least one laboratory, (H) cases scored as IHC-2+ by at least one laboratory. IHC, immunohistochemistry.



Figure S3 Two sections of one case stained by different antibodies. (A-E) Five zones of one case on the section with MXR001 staining that was scored as IHC-0 in manual interpretation. (a-e) AI-assisted interpretation of the five zones (A-E) that had the final score as IHC-0. (F-J) Five zones of the same case on the section with 4B5 staining that was scored as IHC-0 in manual interpretation. (f-j) AI-assisted interpretation of the five zones (F-J) that had the final score as IHC-0 (f, h, and j had the score of IHC-1+. g and j had the score of IHC-0. The final score of f-j was IHC-0). The enlarged local views of A, a, F, and f refer to *Figure 5*. Magnification of (A,B) is 40x under the objective lens. AI, artificial intelligence; IHC, immunohistochemistry.