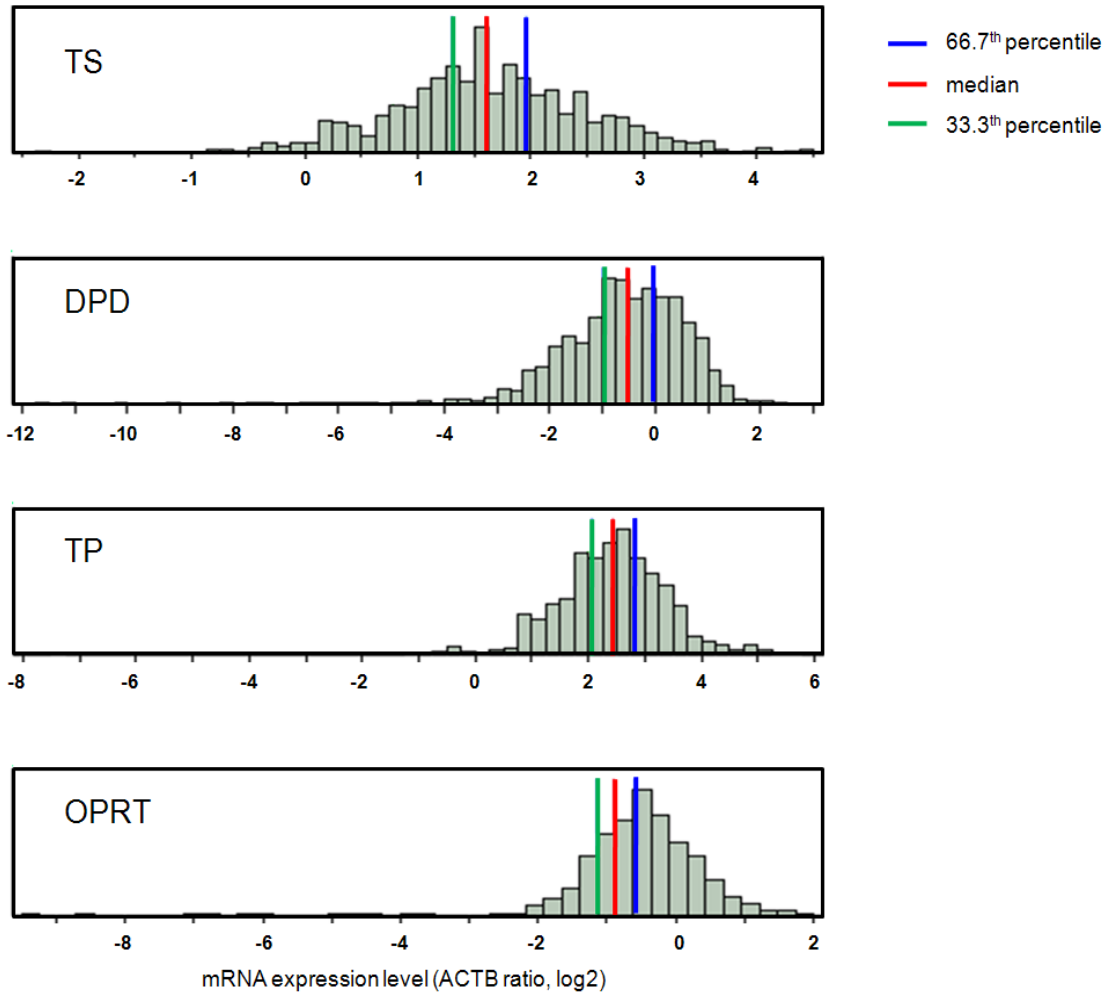


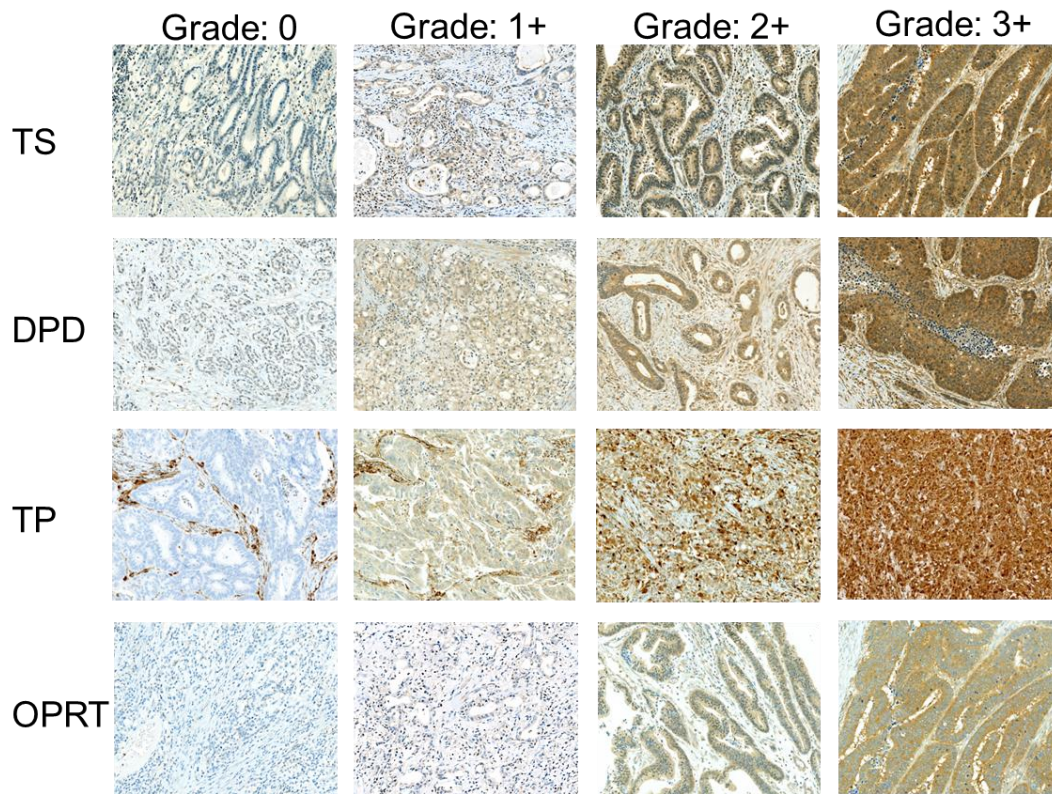
### Supplementary Figure S1.



### Supplementary Figure S1.

Histograms showing the distribution of TS, DPD, TP and OPRT gene expression measured by RT-PCR (x axis, expressed as log<sub>2</sub>). Each gene expression level at the 33.3<sup>rd</sup>, 50<sup>th</sup>, and 66.7<sup>th</sup> percentile was as follows: 2.47, 3.03, and 3.87 for TS; 0.50, 0.69, and 0.97 for DPD; 4.19, 5.44, and 7.09 for TP; and 0.45, 0.54, and 0.67 for OPRT, respectively.

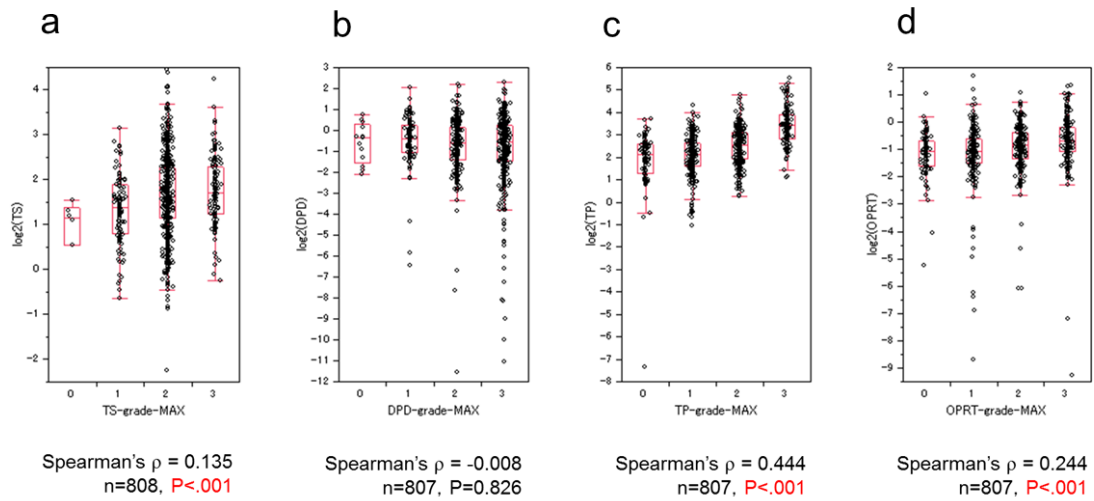
**Supplementary Figure S2.**



**Supplementary Figure S2.**

Representative examples of differently staged gastric carcinomas immunochemically stained for TS, DPD, TP and OPRT (magnification  $\times 100$ ).

### Supplementary Figure S3.

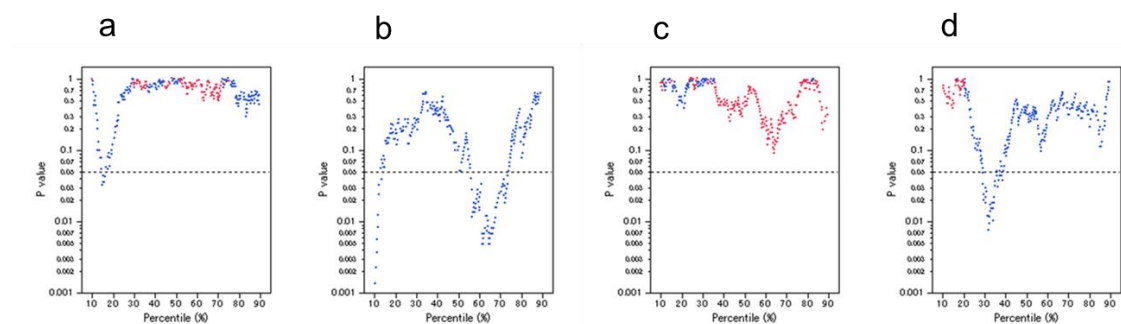


### Supplementary Figure S3.

Relationship between TS, DPD, TP and OPRT expression levels in gastric tumors measured by RT-PCR (y axis, expressed as log<sub>2</sub>) and immunohistochemistry (IHC; x axis). a) Median TS mRNA levels for 4 IHC scores: 0, 1.15 ( $N=6$ ); 1+, 1.38 ( $N=106$ ); 2+, 1.61 ( $N=574$ ); and 3+, 1.70 ( $N=122$ ). b) Median DPD mRNA levels for 4 IHC scores: 0, -0.33 ( $N=13$ ); 1+, -0.39 ( $N=102$ ); 2+, -0.60 ( $N=258$ ); and 3+, -0.53 ( $N=434$ ). c) Median TP mRNA levels for 4 IHC scores: 0, 2.15 ( $N=91$ ); 1+, 2.15 ( $N=290$ ); 2+, 2.55 ( $N=295$ ); and 3+, 3.43 ( $N=131$ ). d) Median OPRT mRNA levels for 4 IHC scores: 0, -1.05 ( $N=86$ ); 1+, -1.05 ( $N=218$ ); 2+, -0.84 ( $N=271$ ); and 3+, -0.68 ( $N=232$ ). The Spearman's test was used to assess correlations between groups.

Box plots show the 25<sup>th</sup> (bottom) and 75<sup>th</sup> (top) percentiles, and the median (middle); the lowest datum was within 1.5 IQR of the lower quartile, and the highest datum was within 1.5 IQR of the upper quartile.

## Supplementary Figure S4.



## Supplementary Figure S4.

Correlations between cutoff values used for stratification and  $P$  values from log-rank tests for TS and DPD gene expression. a)  $P$  values for TS in the surgery-only group; b)  $P$  values for TS in the S-1-treated group; c)  $P$  values for DPD in the surgery-only group; d)  $P$  values for DPD in the S-1-treated group. Results below the dotted line (at  $P < 0.05$ ) are considered statistically significant.