## **Supplemental information**

## A novel method for rapid detection of a *Helicobacter pylori* infection using a $\gamma$ -glutamyltranspeptidase-activatable fluorescent probe

Taro Akashi<sup>1</sup>, Hajime Isomoto<sup>2</sup>\*, Kayoko Matsushima<sup>1</sup>, Mako Kamiya<sup>3,4</sup>, Tsutomu Kanda<sup>2</sup>, Masayuki Nakano<sup>5,6</sup>, Takumi Onoyama<sup>2</sup>, Masashi Fujii<sup>2</sup>, Junko Akada<sup>7</sup>, Yuko Akazawa<sup>1</sup>, Ken Ohnita<sup>1</sup>, Fuminao Takeshima<sup>1</sup>, Kazuhiko Nakao<sup>1</sup>, Yasuteru Urano<sup>3,4</sup>\*

<sup>1</sup>Department of Gastroenterology and Hepatology, Nagasaki University Graduate School of Biomedical Sciences, 1-7-1 Sakamoto, Nagasaki 852-8501, Japan

<sup>2</sup>Divison of Medicine and Clinical Science, Faculty of Medicine, Tottori University, 36-1 Nishi-cho, Yonago 683-8504, Japan

<sup>3</sup>Graduate School of Medicine, The University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033, Japan.

<sup>4</sup>Graduate School of Pharmaceutical Sciences, The University of Tokyo, 7-3-1 Hongo, Bunkyo-ku,

Tokyo 113-0033, Japan

<sup>5</sup>Department of Bacteriology, Institute of Tropical Medicine, Nagasaki University

<sup>6</sup>Department of International Health, Institute of Tropical Medicine, Nagasaki University

<sup>7</sup>Department of Environmental and Preventive Medicine, Oita University Faculty of Medicine

## The relationship between *ex vivo* gGlu-HMRG imaging assay results and extent of atrophic gastritis

	Extent of atrophy						
<i>ex vivo</i> gGlu-HMRG	C-0	C-1	C-2	C-3	0-1	O-2	O-3
imaging assay							
Antrum, FIV-15≧43.667	3	1	6	8	3	3	0
Antrum, FIV-15<43.667	11	0	2	1	2	2	0
Stomach body, FIV-15 $\geq$	2	1	5	6	5	4	0
18.316							
Stomach body, FIV-	12	0	3	3	0	1	0
15<18.316							
FI, fluorescence intensities; FIV-15, values by subtracting FI 15 minutes after sprinkling with gGlu-							
HMRG							
gGlu-HMRG, γ-glutamyl hydroxymethyl rhodamine green							