The OsNRAMP1 iron transporter is involved in Cd accumulation in rice

Ryuichi Takahashi¹, Yasuhiro Ishimaru¹, Takeshi Senoura¹, Hugo Shimo¹, Satoru Ishikawa², Tomohito Arao², Hiromi Nakanishi¹ and Naoko K. Nishizawa^{1, 3}

¹Graduate School of Agricultural and Life Sciences, The University of Tokyo, 1-1-1 Yayoi, Bunkyo-ku, Tokyo, 113-8657

²National Institute for Agro-Environmental Sciences, 3-1-3 Kannondai, Tsukuba, Ibaraki, 305-8604

³Research Institute for Bioresources and Biotechnology, Ishikawa Prefectural University, 1-308 Suematsu, Nonoichi-machi, Ishikawa, 921-8836, Japan

Supplementary materials

Fig. S1. Expression of *OsNRAMP1* in 35S-rice.

Fig. S2. Metal concentrations of the roots (A, B, C, D) and leaves (E, F, G, H) of 35S-rice grown in the absence (control) or presence of 1 μ M CdCl₂. The results are presented as the means \pm SD of triplicate samples. Asterisks indicate significantly different with WT at *P < 0.05 and **P < 0.01 by Student's *t*-test.

Fig. S3. Metal concentrations of the roots (A, B, C) and leaves (D, E, F) of Sasanishiki (Sa) and Habataki (Ha) grown in the absence (control) or presence of 1 μ M CdCl₂. The results are presented as the means ± SD of triplicate samples. Different letters indicate significant differences at *P* < 0.01 by Tukey–Kramer test.

Figure S1



Figure S2



Figure S3

