課題番号（Project number） 59

Identifying interactions of ICF proteins in DNA repair

［1］ 組織（Research group）

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研究費（Expenditure report of research funds）：
consumable goods 300,000 Yen

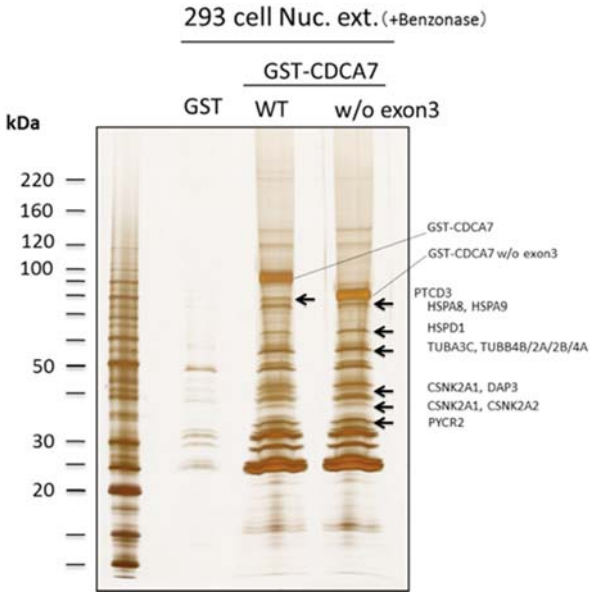
［2］ 研究経過（Research setup）

1. GST-CDCA7 with or without exon 3 was purified from insect cells. The recombinant forms of CDC7A7 were coupled to beads and incubated with extracts nuclear extract from HEK293 cells. Following washing and elution, recombinant CDCA7 and interacting proteins were resolved by gel electrophoresis. Bands indicated with an arrow were excised and examined by mass spectrometry. Only contaminants and no specific, novel interacting proteins of CDCA7 were identified.

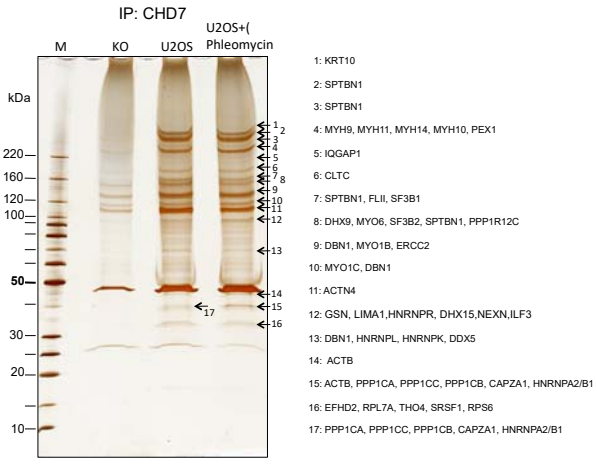
2. Endogenous CHD7 was immunoprecipitated from untreated U2OS cells or U2OS cells treated with the DNA break-inducing agent phleomycin. U2OS cells knockout for CHD7 served as a control. Immunprecipitated CHD7 and interacting protein were resolved by gel electrophoresis. Bands indicated with an arrow were excised and examined by mass spectrometry. Only contaminants and no specific, novel interacting proteins of CHD7 were identified.

［3］成果（Research outcomes）
（3－1）研究成果（Results）

CDCA7



CHD7



（３－２）波及効果と発展性など（Future perspectives）
The results of the proteome analysis are not promising in both cases, because the binding proteins obtained by affinity chromatography for

CDCA7 (Fig.1) and by immunoprecipitation for CHD7 (Fig. 2) are nonspecific proteins. We will use antibody, which has intensive immunoprecipitation activity for both cases.

［4］成果資料（List of Papers）

None yet