

NMR Study on the interaction of HHR23B with S5a

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The ubiquitin(ub)-like domain(ubl domain) of HHR23b is known to specifically interact with S5a, a subunit of 26S proteasome complex. Since HHR23B is one of the necessary factor in DNA repair systems, such an interaction might play an important role in the regulation of the DNA repair process.

Here we report the solution structure of ubl domain of HHR23B from human.

Unlike the ubiquitin protein family, featuring the $\beta\beta\alpha\beta\beta\alpha\beta$ fold of ubiquitin, ubl domain of HHR23B has $\beta\beta\alpha\beta\alpha\beta\beta$ fold.

Furthermore, ubl domain of HHR23B has additional eight amino acids at C-terminus compared with ubiquitin.