

## Letter to the Editor

### <sup>1</sup>H, <sup>13</sup>C and <sup>15</sup>N resonance assignments of the VAP-A: OSBP complex

DOI 10.1007/s10858-006-9057-2

The 25-hydroxycholesterol (25-OHC) traffic by oxysterol binding protein (OSBP) is mediated by complex formation of OSBP with VAMP-associated protein-A (VAP-A). VAP-A is an endoplasmic reticulum (ER) integral membrane protein that contains a cytoplasmic major sperm protein (MSP) domain. There is a FFAT (referring to two phenylalanines [FF] in an acidic tract) motif in OSBP that is recognized by the MSP domain of VAP-A. Thus, the interaction facilitates localization of OSBP to the ER, where newly synthesized 25-hydroxycholesterol (25-OHC) efficiently binds to OSBP (Wyles et al., 2002). As a first step toward understanding the mechanism of 25-OHC traffic mediated by VAP-A and OSBP, we performed NMR studies of the complex composed of a VAP-A MSP domain (5–128) and an OSBP peptide (345–379) containing the FFAT motif. 2D, 3D and 4D NMR experiments were performed with the complex composed of <sup>13</sup>C- and <sup>15</sup>N-labeled VAP-A and non-labeled OSBP, <sup>13</sup>C- and <sup>15</sup>N-labeled OSBP and non-labeled VAP-A, and <sup>15</sup>N-labeled VAP-A and <sup>15</sup>N-labeled OSBP. All resonances of the backbone nuclei (<sup>1</sup>HN, <sup>15</sup>N, <sup>13</sup>C $\alpha$  and <sup>13</sup>C') of the complex were assigned with the exception of N34 C' of VAP-A. Furthermore, more than 90% of the side chain <sup>15</sup>H and <sup>13</sup>C resonances of the complex were also assigned. T367-G373 of OSBP showed minor peaks possibly derived from a minor conformation. BMRB deposit with accession No. 7025. Reference: Wyles et al. (2002) *J. Biol. Chem.*, **277**, 29908–29918.

Kyoko Furuita, Masaki Mishima & Chojiro Kojima\*

*Graduate School of Biological Sciences, Nara Institute of Science and Technology, 8916-5 Takayama, Ikoma 630-0192, Japan*

\*To whom correspondence should be addressed. E-mail: kojima@bs.naist.jp

**Supplementary material** is available to authorised users in the online version of this article at <http://dx.doi.org/10.1007/s10858-006-9057-2>.