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# Oxysterol-binding protein-related protein (ORP) 6 localizes to the ER and ER-plasma membrane contact sites and is involved in the turnover of PI4P in cerebellar granule neurons

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**Abstract**

Oxysterol-binding protein (OSBP)-related proteins (ORPs) are conserved lipid binding proteins found in organisms ranging from yeast to mammals. Recent findings have indicated that these proteins mainly localize to contact sites of 2 different membranous organelles. ORP6, a member of the ORP subfamily III, is one of the least studied ORPs. Using approaches in molecular cell biology, we attempted to study the characteristics of ORP6 and found that ORP6 is abundantly expressed in mouse cultured neurons. Deconvolution microscopy of cultured cerebellar granular cells revealed that ORP6 is localized to the endoplasmic reticulum (ER) and ER–plasma membrane (PM) contact sites, where it co-localized with extended synaptotagmin2 (E-Syt2), a well-known ER–PM contact site marker. E-Syt2 also co-localized with ORP3, another subfamily III