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Title:	Role of ubiquitination in ligand-mediated trafficking of Group I Metabotropic Glutamate Receptors
Authors:	Sahu, Subhashree Shubhrasmita (/jspui/browse?type=author&value=Sahu%2C+Subhashree+Shubhrasmita)
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Abstract:	Group I metabotropic glutamate receptors (Group I mGluRs) are G protein-coupled receptors (GPCRs), that trigger various signal transduction pathways. Group I mGluRs having widespread distributions in the brain have been reported to be involved in various forms of synaptic plasticity, including learning behavior and memory formation. Proper trafficking of these receptors play a crucial role in regulating their functions and localization. Misregulation of these receptors has been reported to cause various neuropsychiatric disorders like fragile X syndrome, schizophrenia, autism etc. Various post-translational modifications such as ubiquitination play critical role in the ligand-mediated endocytosis of group I mGluRs. Subsequent to internalization, the majority of the receptors enter the recycling compartment and return to the cell membrane. Here, we show that deubiquitination is involved in the recycling of group I mGluRs. We further report here that, USP19 (Ubiquitin specific peptidase 19), a specific deubiquitinase (DUB) for mGluR1 plays the critical role in the recycling of the receptor.
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