

Using of Bimolecular Fluorescence Complementation (BiFC) Assays to Study Homo and/ or Heterodimerization of Laminin Receptor 37 LRP/ 67 LR with Galectin-3

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Abstract : There are two isoforms of laminin receptor; monomeric 37 kDa laminin receptor precursor (37 LRP) and mature 67 kDa laminin receptor (67 LR). The relationship between the 67 LR and its precursor 37 LRP is not completely understood, but previous observations have suggested that 37 LRP can undergo homo- and/or hetero- dimerization with Galectin-3 (Gal-3) to form mature 67 LR. Gal-3 is the only member of the chimera-type group of galectins, and has one C-terminal carbohydrate recognition domain (CRD) that is responsible for binding the β -galactoside moieties of mono- or oligosaccharides on several host and microbial molecules. The aim of this work was to investigate homo- and hetero-dimerization among the 37 LRP and Gal-3 to form mature 67 LR in mammalian cells using bimolecular fluorescence complementation (BiFC).

Keywords : 37 LRP, 67 LR, Gal-3, BiFC

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