CRISPR-engineered PRC-1 blocks the activity of RB-3 causing de ubiquitination may combat cancer.

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Abstract

Ubiquitination is a crucial post-translational medication needed for the stable functioning of a proteome within a cell. Polycomb repressive complexes (PRC) belong to diversified class of proteome family largely involved in the ubiquitination. RING 1 and Polycomb group finger protein subunits conjugate together along with the RAWUL domain that further interacts with the Chromobox proteome. The degree of binding and interaction is the deciding factor for the level of ubiquitination performed by the PRC-1 that needs to be functionally efficient in order to prevent the tumour formation. Cas 9 molecule has been incorporated to the PRC-1 that will deduce the functionality of Rb-3 that will not hinder cell ubiquitination ultimately preventing tumour formation. Hela cells are cultured under optimum conditions as a source of PRC-1 molecule. Cas 9 protein was inserted into the cells *invitro* after 24 hours. The cells engineered with the Cas-9 protein were then injected into the mouse. Then, the cells were extracted from the mouse indicated diminished levels. This study aimed to determine the activity of CRISPR-engineered PRC-1 for a successful ubiquitination mechanism to prevent cancer.

Keywords:

Ubiquitination, RING1, RAWUL, Cas 9, Rb-3.

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