

DBT-ILS study finds a way to beat breast cancer

New Delhi, July 28: The cancer research group at the Department of Biotechnology's Institute of Life Sciences (DBT-ILS), has come up with some important observations linking the promotion of tumorigenesis and progression in breast cancer. The group led by Dr Sandip Mishra has observed that a protein called MLN4924, which is an neddylation inhibitor, can be a novel and effective strategy for breast cancer treatment.



The scientists initially found for the first time that the estrogen related receptor beta ($ERR\beta$) is down regulated primarily at the protein level in breast cancer. They then found that Neddylation inhibition by MLN4924 causes an increase in $ERR\beta$ and a decrease in the proliferative potential and clonogenicity of breast cancer cells. They also confirmed that $ERR\beta$ limits the proliferation and clonogenicity of breast cancer cells, hence delineating a molecular mechanism of $ERR\beta$ down regulation and have indicated that MLN4924 can be used to restore the expression of $ERR\beta$. Restoration of ERR beta expression leads to inhibition of cancer growth and migration.

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