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

Contact details:
Dr. Sandip K Mishra (Scientist F, ILS)
D. Mamoni Dash (Communication Officer, ILS)

Link: https://www.ils.res.in/