

Neddylation negatively regulates promotion of breast cancer tumorigenesis and progression

The cancer research group at DBT-Institute of Life Sciences (ILS), Bhubaneswar has found some important observations linking the promotion of tumorigenesis and progression in breast cancer. The group headed by Dr. Sandip Mishra at ILS has observed that a protein neddylation inhibitor, MLN4924 can be a novel and effective strategy for breast cancer treatment.

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

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

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