

Assignments for Medical glyobiology:

Design experiments, using the provided information, to prove this sentence

“N-glycosylation is important for the function of tyrosinase enzyme”

Provided information:

1. The enzyme that is very important for N-glycosylation of the protein is oligosacharyl transferase (OST).
2. N-linked glycosylation inhibitor 1 (NGI-1) is recently found to be a potent OST inhibitor.
3. The activity of tyrosinase enzyme can be directly measured by DOPA oxidase assay.
4. Expression of tyrosinase in the cells and be determined by realtime-RT PCR and Western blotting.
5. The cells that highly express tyrosinase are MNT-1 and B16F10 melanoma cell lines.
6. N-linked glycan is mannose rich, which can be detected by concanavalin A lectin.